

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Gardner, Kenneth; Bills, Nelson L.; Lesher, William G.; Cobb, Kenneth; Allee, David J.

Working Paper

New York's Agricultural Districts--- The Preservation of Farming Rather than the Restiction of Growth

Staff Paper, No. SP 77-16

Provided in Cooperation with:

Charles H. Dyson School of Applied Economics and Management, Cornell University

Suggested Citation: Gardner, Kenneth; Bills, Nelson L.; Lesher, William G.; Cobb, Kenneth; Allee, David J. (1977): New York's Agricultural Districts--- The Preservation of Farming Rather than the Restiction of Growth, Staff Paper, No. SP 77-16, Cornell University, Charles H. Dyson School of Applied Economics and Management, Ithaca, NY, https://doi.org/10.22004/ag.econ.184426

This Version is available at: https://hdl.handle.net/10419/276507

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



NEW YORK'S AGRICULTURAL DISTRICTS --THE PRESERVATION OF FARMING RATHER THAN THE RESTRICTION OF GROWTH

Ву

Kenneth Gardner, Nelson Bills, William Lesher, Kenneth Cobb and David J. Allee

May 1977

No. 77-16

New York's Agricultural Districts -The Preservation of Farming Agather Than the Restriction of Growth

omen de Meio Albert Ministerie (n. 1995). A De reverse la laborat de la servicia de la Colonia.

The the sound of the control of

Marie de la Marie Marie de la Marie de la

by Kenneth Gardner, Nelson Bills, William Lesher, Kenneth Cobb and David J. Allee

INTRODUCTION

Controlling the use of rural land has emerged as a major public policy issue in the last decade. From the nation's settlement to the mid-20th century, the United States prospered economically, strongly influenced by the market system. The effects of economic development on the quality of air, water and urban farms were often ignored. However, by 1950 great cities had emerged and, responding to the private automobile, had sprawled outward into the countryside as many urban areas became polluted and congested. By 1960 suburban living became commonplace for many upper and middle-income people. Concomitantly, specula-16.860 F tion became a more integral part of the market for rural land within many miles of urban centers. For every farm acre actually put to urban use, another was idled, and probably several more were operated at reduced levels of investment. The urban farm that resulted was notably inefficient, raising costs of commutation and most urban services. 2/ One study noted that for 1964 conversion of land from farm to urban use added over \$3000 to the average farm value of \$300 (net of some \$6000 per acre improvement costs) in order to induce the use change. 3/ Pressures mounted for more and better land use controls to ameliorate the effects of urban expansion into the countryside.

By 1970 land use policy moved to the forefront as a major domestic issue, advanced especially by planning professionals and groups with an environmental focus. U. S. Congressmen began proposing a national land use policy, states enacted various public controls over private land use, and isolated local units of government initiated efforts to refine traditional zoning to effectively manage the land use conflicts along the urban fringe. Among the new techniques which emerged to deal with these problems, especially protecting farmland from urban encroachment, is the use-value assessment of farmland.

^{1/} Presentation at the Conference on the Severe Restriction of Development, Syracuse, New York, March 4, 1976.

^{2/} Allee, D. J., et. al. Toward the Year 1985: The Conversion of Land to Urban Use in New York State, Special Series No. 8 (New York State College of Agriculture, 1970).

^{3/} Schmid, A. Allan. Converting Land From Rural to Urban Uses (Resources For the Future and the Johns Hopkins Press, 1968).

New York's Agricultural District Law, however, is unlike other usevalue assessment laws adopted in over 40 states, for it includes several other non-tax provisions which encourage farming. In essence, agricultural districts can be viewed as a mechanism that allows a more orderly conversion from agriculture to urban development along the urban fringe by facilitating the continuation of agricultural production on the land until it is actually needed for more intense purposes. Primarily, districts seek to discourage the excessive disinvestment from farming caused by urban sprawl. Farming is facilitated because various state and local laws or powers are amended or modified within a district. For example, the state's real property tax and eminent domain laws, as well as local authority to tax farmers for non-farm related public service capital investments and to adopt nuisance ordinances, are all modified to facilitate agricultural production.

Some Facts About New York's Farms

and the second

The second of the Seat of the second of the New York has an active and growing farm sector. This portion of the economic base has expanded -- under \$1.0 billion in the 1969 census to over \$1.4 billion in that of 1974. Multipliers are higher for the farm sector compared to most other parts of the economic base -- approaching 3.0, compared to an average of about 2.0. Thus, total economic activity attributable to farming is probably between \$4 and \$5 billion.

Land in farms continues to decline, 10.1 million acres in 1969 fell to 9.5 million in 1974. Farms occupied about twice the present proportion of the state's 30.6 million acres at the high point in the decade after 1900. Obviously, direct use by urbanization has been a minor part in the change. Technology made most of those acres absolute for farming at the purchase and tax costs of that land. Some of it wouldn't provide a living for a farmer today if it were to be had for nothing. Generally, technological changes have favored those lands that are level and have good internal water-handling capacity.

If a farmer from 1905 returned today, the only thing he'd recognize was who was doing the work. Somewhat over three-quarters of the labor on farms then was provided by the farmer and his family. Today it is only slightly under three-quarters. Changes in capital intensity and the importance of land have been dramatic. Land was most of the investment then. Today equipment, livestock, and real estate improvements count for much more. Also cash expenses as a ratio to total capital have increased dramatically. The farmer is less self-sufficient, much more dependent upon off-farm services, processes his output much less, and is more vulnerable to the price-cost squeeze. Reinvestment in new real estate improvements have become particularly important in maintaining competitiveness in the livestock industries which in 1974 accounted for \$989 million of the \$1,437 million total sales.

Real estate taxes are often cited as a major factor in farmer interest in public land use controls. Over the state they have increased in recent years (see Table 1). For dairy farms included in the Cornell Farm Business Management projects they were \$1,270 in 1969 and rose to

\$2,050 in 1975. These farms were larger and more likely to be the sole source of farm family income than the average. They are also more apt to be located out of the close-in urban fringes of the state. Note that real estate taxes as a percent of total cash expenses fell somewhat in this period (see Table 2). Other expenses rose more rapidly largely due to inflation, but partly because these farms also increased the amount of business done on their land base. Incomes did not rise proportionately.

Table 1. Change in Real Estate Taxes*

and Barton on

. . .

Type				
of farm	1969	1972	1975	
Dairy farms	\$1,270	\$1,604	\$2,050	
Poultry farms	\$1,103	\$1,337	\$1,821	
Fruit farms	\$2,048	\$2,421	\$2,716	

On farms in the Farm Business Management projects (Cornell University and County Extension Service).

Table 2. Real Estate Taxes as Percent of Total Cash Expenses*

Туре			
of farm	1969	1972	1975
Dairy farms	4.0	3,7	2,9
Poultry farms	1.0	0.9	0.6
Fruit farms	5.0	5.1	4.0

On farms in the Farm Business Management projects (Cornell University and County Extension Service).

BACKGROUND AND PROVISIONS OF THE NEW YORK AGRICULTURAL DISTRICTS LAW

Following World War II there was an increasing awareness on the part of state and local officials, farm leaders, agri-businessmen and the New York State College of Agriculture and Life Sciences at Cornell University that good farmland was being diverted to non-farm uses. Prior to this the concern of the agricultural establishment was with the so-called land abandonment problem. In the '30's farmers left many acres that no one seemed to want. The state purchased some four million acres at \$4 per acre. In the 40's and 50's, prosperity, the auto and the snow plow allowed virtually every rural house to be filled and every tax bill to be paid on the land that left farming. Awareness that many acres which

were not technologically obsolete were shifting to non-farm use or sitting idle slowly grew. This awareness grew to deep concern during the 60's as urban penetration put heavy pressure on farmlands resulting in higher taxes, restrictive ordinances and land speculation. Urban sprawl was accompanied by idle and under-used land. Farmers near urban areas were deferring new real estate investments.

Two efforts, one to provide farmland use-value assessment and the other to provide direct state regulation of agricultural and other land, were considered in New York during the mid-sixties. Legislation that would have permitted farmland to be assessed according to present use was passed by the New York Legislature in 1965 and 1966. Although use-value assessment of farmland had been practiced in the state implicitly for some time, farm leaders believed that this practice could not exist forever in areas of rapidly increasing land prices adjacent to larger metropolitan concentrations. Farm leaders, therefore, supported the passage of a farmland use-value assessment law. Others, including those in local government, opposed this legislation, which helped lead to an executive veto. If one of these bills had passed, New York would have had a farmland use-value assessment law similar to those presently in 40 other states. 4/

It is instructive to note that a very different approach to land use control was being considered in the state at the same time. Due to interest at the state-level in better planning and government performance, the Office of Planning Coordination (OPC) was created in 1966. OPC was given broad authority to: restructure the planning and land use control laws; act as a "watchdog" over other state agencies' spending and performance; and work with local units of government on land use planning activities.

At its inception OPC was well staffed and funded, and became aggressively involved in preparing a state comprehensive plan. Then in 1970 OPC proposed legislation, S.B. 9028, to implement the plan. The proposed legislation mandated major revisions in the state's planning laws to provide a more coordinated approach. Each level of government would have been required to produce a long range plan that would then be reviewed for compatability with the state plan. S.B. 9028 also provided for state involvement in the control of all areas of "critical state concern" -- 75 percent of the state, including farm areas. The state control agency was to be a seven man board in Albany. The proposed function of this state board has been referred to by some as one involving "control of the controllers." Local governments would have been given the opportunity to control land use in the areas of critical state concern, according to standards set by the state board. Failing this, the state board would have been empowered to assume direct control functions.

Though he did not publicly endorse S.B. 9028, the Governor assumedly backed the proposal. S.B. 9028 was introduced as a study bill late in

^{4/} Council on Environmental Quality. "Untaxing Open Space," (Washington, D. C., April 1976, p. iii).

1970. During the summer of 1971, just after OPC released the physical portion, or Part-I, of its "New York State Development Plan," hearings were held on S.B. 9028; though these hearings were not widely publicized. The reaction to S.B. 9028 was generally negative, since many viewed it as moving zoning power to higher levels of government and into the hands of "professionals." In 1971, at the time when S.B. 9028 might logically have been introduced for passage, the New York State Legislature decided to cut OPC's budget by 60 percent (eliminating the comprehensive planning and functional coordination units), changed its name to Office of Planning Services (OPS) and reduced its authority largely to that of assisting local government in their planning activities. Later, on April 1, 1975, OPS was abolished, and the remnants of OPS were moved into the newly formed divisions of Community Affairs and State Planning within the Department of State.

In 1966 then Governor Nelson Rockefeller, at an Agricultural Leaders Forum at Cornell University announced the appointment of the New York State Commission on the Preservation of Agricultural Land. The Commission was established -- "to bring public action to bear on a problem too serious to be ignored and too complex to be dealt with at the local level alone. New York needs action now to develop a coordinated program assuring that we and our posterity shall have the productive agricultural lands demanded by a rapidly growing population."

The Commission's objectives were to:

- 1) Define geographically those areas deemed essential for preservation in agricultural use;
- Propose measures for preservation of these areas for the production of food and fibre;
- 3) Make recommendations for maximum use of water for irrigation to increase the quantity and quality of agricultural production.

The major recommendations of the Commission included:

- I. Legislative provisions should be made for the sustained participation of agriculture in formal planning processes at all levels of government within the state.
- II. The taxation of new farm real estate improvements should be deferred for five years.
- III. Provisions should be made for creating zones in which agriculture would have priority over other uses.
- IV. Legislation should be considered that would provide for the creation by the state of prime agricultural districts in which:
 - (a) procedures for the exercise of the right of eminent domain would be modified;
 - (b) present use taxation of farms would be permitted; and

- (c) local ordinances restricting farming activities would be prohibited.
- V. Legislative and administrative actions should continue to promote increasingly effective management and use of the state's water resources, including additional irrigation.
- VI. The real property tax law should be amended to provide improvements in the arrangements and procedures for assessing real property throughout the state, but no legislation should be passed at this time to provide for statewide present-use taxation of any type of property.

A number of actions were taken in rather quick succession which addressed the findings and recommendations of the Commission. For example, in 1967 a liaison officer was appointed between the Department of Transportation and the Department of Agriculture and Markets. The purpose was to assist in minimizing the impacts of highway corridors on agriculture.

In 1968 legislation was enacted to address the deferment of taxes on new farm real estate improvements for five years.

The Agricultural Resources Commission was created in 1969. The purpose of this Commission was -- "to encourage the science of agriculture in the state, to provide for the participation of agriculture in economic planning and to coordinate planning in agriculture and related activities."

Incidentally, the Assessment Improvement Act was passed in 1970 and was intended to improve assessment procedures across the state on a county-by-county basis. Two court cases have since given this new meaning -- one (Hellerstien) calls for full value assessment of all real estate and another (Muth) allows a single comparison to the equalization rate to provide a basis for reduced assessment and rebate of taxes to those overassessed.

1971 found the passage of the Agricultural Districts Law which became effective in mid-September of 1971.

In this law the Declaration of Legislative Findings and Intent are significant. It is the declared policy of the state to conserve and protect and to encourage the development and improvement of its agricultural lands for the production of food and other agricultural products. It is also the declared policy of the state to conserve and protect agricultural lands as valued natural and ecological resources which provide needed open spaces for clean airsheds, as well as for aesthetic purposes.

Some of the major anticipated effects of the Agricultural District Law are:

1) Farmers who qualify may apply for an agricultural value assessment on their lands. (Few did in fact unless reassessment took place, and to date most farmers in districts have not applied.)

- 2) Local governments are limited in enacting ordinances that would restrict or regulate farm structures or farming practices.
- 3) State agencies shall modify administrative regulations and procedures to encourage the maintenance of farming insofar as is consistent with the promotion of health and safety.
- 4) The right of public agencies to acquire land or to advance funds for non-farm development may be restricted or subjected to delays and the agencies will be required to consider alternatives not in the agriculture district.
- 5) The power of public service districts to tax farmland for sewer, water, light, and non-farm drainage will be restricted.

Steps in District Formation

There are several important steps which are required in creating agricultural districts. These include:

- 1) Landowners prepare a district proposal and submit to the county legislative body.
- 2) The county legislature appoints (if not previously done) an agricultural advisory committee of four farmers, four agribusinessmen and one county legislator.
- 3) The county legislature provides a public notice for a thirty-day period for public reaction.
- 4) The county legislature refers the proposal to the agricultural advisory committee and the county planning board.
- 5) The agricultural advisory committee and county planning board report their recommendations to the county legislature.
- 6) The county legislature holds a public hearing on the proposal and subsequently may adopt it as a plan.
- 7) If the proposal is adopted as a plan, the county legislature submits the plan to the State Commissioner of Environmental Conservation.
- 8) The Commissioner receives reports from the State Agricultural Resources Commission and the other state agencies.
- 9) The Commissioner may certify the plan or a modification of it as eligible for a district.
- 10) After certification, the county legislature may hold another public hearing on the plan. If the plan was modified by the Commissioner, the county legislature is <u>required</u> to hold another public hearing.

11) After certification and the second public hearing, it any, the county legislature may disapprove; if not, the plan becomes effective as a district.

As of February 15, 1977, there were 336 agricultural district proposals which have resulted in 315 districts formed; seven certified for districting; four reviewed by A.R.C.; and ten waiting for final review. A total of 4,688,914 acres are included in these districts. Forty-seven (47) counties have one (1) or more districts.

Once created, agricultural districts remain in force for a period of eight years. At the present time, there is no provision in the law to modify districts once they are created.

Provision is made for the review of districts at the end of the eight years. Essentially the procedure is exactly the same as the initial procedure except there is no petitioning required.

The state has the authority to create agricultural districts on unique and irreplaceable land of the state. This provision has not been used to date and probably will not be employed in the immediate future.

الأنجيب الجرائل الرجي

The Most Significant Results of the Law to Date

The statistics just mentioned, number of districts, number of acres, number of counties with districts are impressive. However, they are only indicative of some even more important facts.

This is a most impressive example of participatory democracy. Each of these districts resulted from landowners, citizens petitioning their local government for the creation of the districts. Each district resulted from the petitioners being for something.

Furthermore, in this law the decision-making process is carried out at the county level. This is a marked departure from the way in which processes were carried out in the past. It recognizes the fact that natural resources span local political boundaries.

New leadership has emerged in rural areas which in itself may prove to be the major benefit of the entire experience. This leadership is providing the talent for not only the creation of agricultural districts, but also for filling other roles both private and public across the state.

Since the law has only been in effect for five years, six months and about nineteen days, it really is too early to say anything definitively about how successful it is in terms of preserving agricultural lands. However, it has proven to be successful in achieving more involvement from the agricultural community in the planning process at all levels of local and state government.

This involvement begins with the petitioning process -- people talk- on ing to their neighbors about mutual interests and concerns. It grows

and is fostered by these same people making contacts with the agricultural district advisory committee and the county planning boards. Obviously, these same people come into contact with other interests through the public hearing process. People petitioning for something is in marked contrast to much recent experience. This is positive citizen participation.

Another example of this participation in the planning process is brought about by the establishment of the agricultural district advisory committee. This body composed of four farmers, four agri-businessmen and one county legislator provides for the direct input of agricultural interests into the review of agricultural district proposals. The law requires this body to make recommendations to the county legislature on the impacts of the districts. Here again, the people most knowledgeable about the industry can participate in the process of local land use planning.

As mentioned earlier, the A.R.C. represents agriculture at the state level. The A.R.C. is required to certify that agriculture district proposals are made up predominantly of agricultural lands. In this process, field reviews and contacts with other state agencies and departments bring about discussion of mutual interests and concerns and sort out inter-agency goals and objectives on each agricultural district.

EVALUATION OF THE RESULTS OF MEASURES TAKEN

Response to the New York Agricultural District law has been immediate. Initial proposals on the part of landowners to create Districts were forwarded to county legislatures during the Fall of 1971. Within the program's first year, two districts involving roughly 6,000 acres were formed by county legislatures (Table 3). The program rapidly gained momentum and upwards of 500,000 acres were added during the second year. By September 1976 -- five years after the program's inception -- slightly over 3.8 million acres were included within the boundaries of an Agricultural District.

The trend has been toward larger districts. Districts initially created were under 3,000 acres on the average (Table 3). Districts created during the fifth year averaged 24,657 acres. The average district in New York now contains just under 14,000 acres.

Overall, county legislatures and state agencies have been highly receptive to landowner initiatives to create Agricultural Districts.

New York's 277 districts have stemmed from 286 separate petitions by interested landowners (Table 4). According to records provided by the Agricultural Resources Commission, only six petitions have been ultimately rejected after review at the county level, public hearings, and reviews of the proposal by the New York State Department of Environmental Conservation and the Agricultural Resources Commission.

Reviews at the county and state level often do result in "modifications" of the original proposal. That is, the boundaries of the proposed

district are often redrawn to include or exclude certain parcels of property. 5/ Thirty percent of all proposals have undergone small changes in district boundaries (Table 4).

Table 3. Number of Districts, Total Districted Acreage and Average District Size for New York State, 1971-76

Agricultural Districts					
Year	Number	Acreage	Acr	es per District	
1971-72 1972-73 1973-74 1974-75 1975-76	2 59 89 81 56	5,928 429,189 849,330 1,172,768 1,380,839		2,964 7,274 9,543 14,478 24,657	
Total	277	3,838,114	en e	13,856	

12

Source: Agricultural Resources Commission.

Table 4. Disposition of Agricultural Districts Proposed by Landowners in New York State, September 1971-August 1976

Disposition of Districts Proposed	Number		Percent
			1.34
Rejected	6	44.4	· 2.0
Combined with Existing District	3	1	1.0
Formed	277		96.8
No Change in Boundaries			66.4
Boundaries Modified	87		30.4
By County	58		20.3
By State	29		10.0
Total	286		100.0

Source: Compiled from New York State Agricultural Resources Commission Reports in Agricultural District Status.

About one-rhird of the modifications have been initiated at the state level. Presumably, these are in conjunction with the State's responsibility to determine that a proposal is in accordance with statewide plans and that the acreage involved is parimarily made up of viable agricultural land.

enterior de la companya de servicio

^{5/} When measured in terms of acreage, the net effects of the modifications have been small. They do illustrate, however, that the boundaries of the new district are discussed by landowners, legislators, and representatives of county and state agencies.

Two-thirds of the modifications have come at the county level. Many of these result from public hearings where some landowners express their final preferences for participating in or being excluded from the district.

The response across New York has also been remarkably even in the sense that 44 of 57 county legislatures have created Agricultural Districts. (New York has 62 counties, but five of these constitute New York City) -- see Figure 4. Four of these -- Nassau, Putnam, Rockland and Westchester -- are immediately adjacent to New York City and now contain a very limited amount of commercial agriculture. Efforts to create Districts probably cannot be expected there. Similarly, a few non-participating counties (Fulton, Hamilton and Warren) are mountainous and large land areas are unsuited for farming. The remainder of the non-participants -- Chemung, Jefferson, Schenectady and Suffolk Counties -- have commercial agriculture in varying amounts, but have not created Districts at this juncture in the program. 6/

District Size: District size is a critical feature of the New York law because the legislature's intent is to encourage commercial farming. Commercial farm businesses require immediate access to a wide variety of purchased production inputs — farm machinery and fertilizer, for example — and assembly outlets for raw farm products. There probably is some threshold volume or "critical mass" of total farm production below which the necessary input and marketing services cannot be sustained. 7.8/ If the services disappear, farm operators are confronted with the time and expense of securing services at a greater distance.

The New York law allows for a minimum of 500 acres in an individual district. However, few small districts have been petitioned for by landowners. Only seven of the 277 districts formed thus far contain fewer than 1,000 acres -- Table 5. These smaller districts account for well under one percent of the total program acreage. At the other extreme, districts with 25,000 or more acres make up 52 percent of the program acreage. New York's largest agricultural district, located in St. Lawrence County, contains more than 243,000 acres (about 535 square miles).

Caare garagaalee ee

San Branch Strain Strain Strain

^{6/} The Jefferson County legislature has rejected several proposals, but new ones are currently pending. Proposals are also being discussed in Chamung and Suffolk County.

Conklin, Howard E. and Richard Dymsza. <u>Maintaining Viable Agriculture in Areas of Urban Expansion</u>. New York State Office of Planning Services, Albany, New York, 1972.

^{8/} Dhillon, Pritnam S. and Donn A. Derr. "A Critical Mass of Agriculture and the Maintenance of Production Open Space." <u>Journal of the Northeast Agricultural Economics Council</u>, Vol. 3 (May 1974).

Farm numbers also constitute a useful dimension of District size. The law specifies that an Agricultural District can be comprised of a single farm but the average District contains 40 farms (Table 6). 9/Almost one-fifth of all Districts contain fewer than 10 farms. At the other extreme, six of New York's largest Districts contain 139 farms on the average.

Table 5. Number of Districts and Districted Acreage By Size of District for New York State, August 1976

Size in		<u>Districts</u>		l Acreage	
Acres	Number	Percent	Number	Percent	
Under 1,000	7	2.5	5,797	0.1	
1,000-2,499	36	13.0	62,409	1.6	
2,500-4,999	63	22.7	240,075	6.2	
5,000-9,999	67 .	24.2	473,577	12,3	
10,000-24,999	66	23,8	1,048,842	27.3	
25,000 or more	38	13.7	2,007,414	52.3	
Total	277	100.0	3,838,114	100.0	

Source: New York State Agricultural Resources Commission Reports on Agricultural Districts status.

Table 6. Number of Farms Within the Boundaries of Agricultural
Districts in New York State, August 1976

Farms per	Dist	Districts		ns.a/	Farms per	
District	Number	Percent	Number	Percent	District	
Under 10	53	19.1	330	3.0	6	
10-24	96	34.7	1,484	13.4	15	
25-45	66	23.8	2,286	20.6	35	
50-99	37	13.3	2,509	22.6	67	
100-199	19	6.8	2,639	23.8	71	
200 or more	6	2.2	1,845	16.6	139	
Total	277	100.0	11,093	100.0	40	

a/ Farms with yearly receipts of \$10,000 or more.
Source: Compiled from New York State Agricultural Resources Commission Reports on Agricultural District Status.

See New York State Agricultural Resources Commission. "Reports on Agricultural District Status." (mimeographed) Department of Agriculture and Markets, Albany, New York.

^{9/} Available data do not permit one to use the term "farm" in the manner it was used in earlier sections of this report. According to the Agricultural Resources Commission, only those farms with gross receipts of roughly \$10,000 or more were counted for their purposes. Most Districts, therefore, probably contain several additional small or part-time farms.

See New York State Agricultural Resources Commission, "Reports on

District Configuration: While the law is specific with respect to district size, landowners and county legislatures received no specific advice on district configuration. The law merely requires that county legislatures and state agencies take measures to insure that an Agricultural District consists predominantly of viable agricultural land and that the district would not be inconsistent with state and local comprehensive plans, policies and objectives. Viable agricultural land is defined as:

Land highly suitable for agricultural production and which will continue to be economically feasible for such use if real estate taxes, farm use restrictions, and speculative activities are limited to levels approximating those in commercial agricultural areas not influenced by the proximity of urban and related non-agricultural development.

In judging viability, the law requires that:

... any relevant agricultural viability maps prepared by the Agricultural Resources Commission shall be considered, as well as soil, climate, topography, other natural factors, markets for farm products, the extent and nature of farm improvements, the present status of farming, anticipated trends in agricultural economic conditions and technology, and other such factors as may be relevant.

A written report on each proposal is prepared at the state level by the Agricultural Resources Commission. One purpose of the report is to establish to the satisfaction of state agencies that the proposed acreage predominantly consists of viable agricultural land.

As a practical matter, physical features and patterns of land use in virtually all of New York State preclude the delineation of a District that is solely comprised of "viable" farmland. Some of New York's total land in farms has no direct use for production. The typical New York farm according to the 1974 census contains 205 acres and 124 acres are used for crop production. The remainder -- toodland, waste land and the like -- has only incidental use for the production of livestock or crops yet whole farm units are included in a listrict.

Similarly, farms and farmland in New York are generally co-mingled with land in several non-farm uses. Residential, commercial, forest and "non-uses" -- idle land -- are often interspersed with land owned or controlled through lease by commercial farmers.

Several county legislatures have delineated districts that involve two or more separate tracts of land (Table 7). Statewide, 16 or 28 percent of all counties have tended to form districts which are comprised of two or more separate tracts of land. Presumably, the acreage that separates districted tracts is deemed to have no viable use for commercial farming, is farmland owned by individuals who have declined to participate in the program or some combination of the two. Districts with discontiguous boundaries make up one-third of the total program acreage.

Table 7. Configuration of Agricultural Districts for Counties, August 1976

	Counties ^{a/}		Agricultural Districts				
Configuration	No.	Pct.	No.	Pct.	Acres	Pct	
						 	
No Districts	11	25	***	***	Andrew State		
Contiguous Districts	27	47	147	53	2,573,749	67	
Discontiguous Districts	16	28	130	47	1,264,365	33	
Total	57	100	277	100	3,838,114	100	

a/ Five counties which make up New York City are excluded.

On the other hand, several New York counties have formed districts with contiguous boundaries that involve a continuous tract of land. Some of this acreage is not owned or controlled through lease by commercial farmers and involves a non-agricultural use. 10/

Metropolitan-Nonmetropolitan Contrasts: In 1970, 26 of New York's 62 counties were classified as metropolitan or as Standard Metropolitan Statistical Areas (SMSA). Twenty-one SMSA counties are located outside of New York City and contain commercial agriculture in varying degrees. Legislatures in 16 SMSA counties have ratified one or more proposals to create an Agricultural District.

Thus far, 80 (or 29 percent) of all Districts have been formed in New York's SMSA counties (Table 8). Similarly, SMSA counties account for 28 percent of all districted acreage. Districts located in SMSA counties are roughly 1,800 acres smaller, on the average, than those located in non-SMSA counties.

Differences in average size do not appear to be attributable to differences in the number of large commercial farms found in Districts (Table 9). The average district in an SMSA county has 39 farms -- the average district in a non-SMSA county contains 40 farms. Rather, the differences probably stem from a tendency for more rural counties to include more nonfarm acreage within district boundaries.

Agricultural Districts in SMSA counties account for 28 percent of all districted farms. In general, these data suggest that efforts to form Districts in metropolitan counties have proceeded at an intensity that compares favorably with efforts in more rural or nonmetropolitan portions of New York.

^{10/} For example, Ball studied patterns of land use within the boundaries of six Agricultural Districts in Columbia County, New York. The contiguous boundaries of the districts studied involved 129,700 acres. Of these, about 1,600 acres were in residential, commercial, and industrial uses.

See Ball, John. Patterns of Agricultural District Formation in Columbia County, New York. Staff Paper No. 77-3, Department of Agricultural Economics, Cornell University, January 1977.

Table 8. Districted Acreage for Metropolitan Counties,
New York, August 1976

and the same of the same

Location	Districts	Districted	Acreage	Acres p	er District
SMSA Non-SMSA	No. Pct. 80 28.9 197 71.1	<u>Acres</u> 1,004,486 2,833,628	Pct. 28.2 71.8	1	cres 2,556 4,383
Total	277 100.0	3,838,114	100.0		3,858

Table 9. Districted Farms for Metropolitan Counties,
New York, August 1976

Location Districts	Districted Farms	Farms per District
No. Pct.	No. Pct.	No.
SMSA 80 28.9 Non-SMSA 197 71.1	3,128 28.2 7,965 71.8	39
Total 277 100.0	11,093 100.0	40

Agricultural Districts and City Size: Rural-urban contrasts are abrupt in New York State. Using whole counties as units of observation, therefore, can mask important differences in the influence of cities upon the environment for commercial farming. Some of these differences can be drawn into a sharper perspective by examining the location of Districts relative to cities of various sizes.

Most observers agree that the influence of cities on commercial farming tends to decrease as the distance from cities increases. Belts or rings of urban influence have been discussed in New York 11/, but distinctions have yet to be drawn in quantitative terms.

In lieu of a sophisticated measure of urban pressure, New York's Agricultural Districts were arranged to reflect their proximity to large central cities (cities shown in Figure 4 with a population of 50,000 or more). Results are shown in Table 10.

ing the particular of the control of the control of the control of the property of the control o

^{11/} Bryant, William R. Farmland Preservation Alternatives in Semisuburban Areas. A. E. Ext. 75-5, Department of Agricultural Economics, Cornell University, April 1975.

Table 10. Agricultural Districts and Districted Acreage by Distance to an Urban Place with a 1970 Population of 50,000 or More, New York, August 1976

and the first of the second	Dist	ricts	Districted	Acres	
Distance to Place	No.	Pct.	Acres	Pct.	per District
			(1000)		The second
25 miles or less	81	29.2	721.3	18.8	8,905
0-5 miles	1	0.4	2.6	a/	2,600
6-10 miles	21	7.6	175.3	4.6	0,347
11-25 miles	59	21.3	543.4	14.1	9,210
More than 25 miles	196	70.8	3,116.8	81.2	15,932
Total Total	277	100.0	3,838.1	100.0	13,856

a/ Less than 0.1 percent

The second second second second

Less than 30 percent of all districts are located within 25 miles of a large central city. These districts are judged to be within a reasonable commuting distance to New York's largest urban centers. Moreover, districts within commuting distance of large cities are relatively small in size and they account for less than one-fifth of the total program acreage. In general, size of district increases as distance to the central city increases.

On the other side of the coin, the bulk of New York's Agricultural Districts and districted acreage are in locations that are far removed from larger central cities. Presumably, urban-related pressures on commercial farming are less intense there.

When smaller urban places are taken into consideration, it can be seen that efforts to form districts in New York are in locations some distance from an urban place of any kind. Less than 12 percent of all districts are located within five miles of an urban place. More than 40 percent (120 districts) are within 10 miles of an urban place, but the bulk of these are in the vicinity of cities and villages with a population of 25,000 or less.

A similar picture emerges with districted acreage. The bulk of all acreage committed to the program is located at some distance from New York's large and medium-sized cities.

<u>Discussion</u>: The New York Agricultural District law has been rapidly implemented. More than 3.8 million acres (12.5 percent of the State's total land area) have been dedicated to agricultural uses through the creation of Agricultural Districts during the program's five-year life. It seems likely that several more local initiatives to form districts will be forthcoming.

The state of the second of -17^{-1} and the second of t Some Criticisms of Agricultural Districts

Although the agricultural district concept has been popular in New York, it has also been criticized. One alleged criticism focuses on the allegation that it causes erosion of the local tax base. For example, Dutchess County has seriously contemplated declaring a moratorium on the creation of additional districts to protect its real property tax base.

Another criticism focuses on the administration of the law at the state level. Some believe that too much nonfarm land is included in districts. The rationale at the state level is that initially all districts should be authorized, even though some land is incorrectly included. The view held is that the best time to modify or dismantle districts containing a large amount of marginal land or land that has succumbed to urban pressures is at the end of eight years when each district is The service of the se

Interdependent with the state problem is a local problem. It often is argued that some counties, when approving a proposed district, are too inclined to grant the request as submitted rather than force adjustments. Thus, some districts have irregular shapes, some districts are scattered, while other districts omit good farms.

Another criticism of the law concerns the use-values of different types of farmland established by the State Board of Equalization and Assessment (SBEA). The law has been interpreted by SBEA as requiring that they annually determine use-values for each county in the state, and that assessors in all taxing jurisdictions must use these values as the assessed values assigned to any parcel for which use-value assessments have been granted in response to owner applications. SBEA establishes values for different types of land (cropland, orchards, vineyards, muck) according to productive capability (high, medium, low). The values are based on comparable sales data for each county. These values have become an issue, principally for two reasons: (1) the use of sales data in deriving them; and (2) the use of these values as a basis for increasing assessments on farmland in general, especially in areas for which owners have not applied for use-value assessment. 12/

Some argue that by using comparative sales & speculative element is included in the value of the land that has no bearing on the value of land used solely for farming. SBEA interprets the law as directing it to establish the "average value per acre" of land purchased by farmers and not "farm value" as it might be determined through capitalization of net returns. 13/ As a result, SBEA values have been increasing rapidly

The Company of the Co 12/ In the beginning most of the districts formed were in the more rural areas and farmers did not apply for use-value assessments primarily because the land was selling closer to its value in agricultural production. However, as more districts were formed in more semi-rural areas where municipalities were assessing farmland at much higher values, more use of this provision has been made.

^{13/} Gordon S. Locken. "Alternative Methods of Estimating the Use-Value of Farmland in New York State," unpublished M.S. thesis, Dept. of Agricultural Economics, Cornell University, 1976.

with the general land appreciation -- an appreciation established by all market forces including urban influence; not only on the profitability of a farming enterprise. This has led to some fairly high as well as inconsistent rates among counties for various types of farmland. 14/

And the Agricultural District Law has been criticized as too "soft" to have any lasting effect on the loss of farmland, especially near urban centers. It is argued that conversion of farmland has taken place within Agricultural Districts, and thus conclude this land use policy mechanism is not effective.

WHY AND WHERE CAN AGRICULTURAL DISTRICTS BE EFFECTIVE?

The normal criteria to evaluate the effectiveness of laws such as the Agricultural District Law are those factors which have an environmental focus -- thwarting suburban sprawl to reduce pollution, congestion and implicitly growth. However, since zoning, subdivision regulations or anything else have not been able to achieve these goals, it seems unrealistic to expect a fiscal measure such as use-value assessment to do so by itself. Criteria more reasonable to judge the effectiveness of the Agricultural District Law, it would seem, concerns the impact of speculation on land values, which in turn affects assessments and ultimately affects the profitability of farming, as well as does other factors such as the local adoption of various nuisance ordinances restricting agricultural activities.

With full market-value assessments, it is assumed that the market price of houselots indicates the value of land at the highest and best use in areas where at least some land is going for this purpose. Furthermore, this assumes that the market price is not distorted by any uncertainties about the future rate of urban growth and the possible changes in housing preferences. But this is generally not the case, for the uncertainties about which areas will appeal to urban users and how fast urban demand will grow forces rural-fringe landowners to become participants in a "real estate roullette game." For several years this game seemed fairly safe with high stakes and low risks; and many became involved. But in New York, with the current declining rates of population growth, rapidly rising commuting costs and the escalating costs of constructing single-family dwelling units, the risks of the game have gone up while the chances of winning have gone down. The possibility of all of the urban-fringe areas becoming complete suburbia in the next decade seems quite remote. Therefore, the speculators are in a gambling game -hoping to sell at some future time for \$10,000 per acre, but facing the possibility of receiving \$300 per acre.

^{14/} William G. Lesher. "Land Use Legislation in the Northeast," A. E. Research 75-23, Department of Agricultural Economics, Cornell University, December 1975, pp. 24-36.

The important question concerns what effects speculation has on retention of farming. To facilitate an answer, it is useful to delineate a rural-urban gradient. Bryant has divided this continuum into five classes: rural, semi-rural, semi-suburban, suburban and urban. 15/

It seems likely that farmland use-value assessment will only have an effect on helping maintain farming in the semi-rural areas. Farming is not inhibited by urban influence in the rural areas, while in the urban and suburban areas the urban demand for the little farmland remaining is very high. And even in the semi-suburban areas, where there still remains a substantial amount of agricultural land in production, suburban development has advanced too far for farmland use-value assessment to make much of a difference. Land prices have risen too high for most farmers to expand their operations by land purchase and arrangements for renting land under these circumstances are not satisfactory, especially for dairy farmers. Farmers in these areas often are unwilling to invest in new buildings even on their own land. Also, the volume of agriculture needed to support input suppliers, marketing operations and other agribusiness concerns may drop below the critical mass.

In the semi-rural areas agriculture remains viable, although isolated cases of speculation motivate a few farmland parcels to sell for double or triple their value in farming. This type of speculation often results in a reassessment of all farmland at its imagined nonfarm value, regardless of the fact that the area would not become a massive suburb for many years, if ever. In this situation, agricultural land can be forced out of production because its owners are discouraged from making the continuous new investments in farm improvements that are a prerequisite to continued farm operation. Moreover, farmland forced out would have no viable alternate use, eventually growing into brush.

Although the Northeast has many semi-rural areas experiencing this type of phenomenon, Orange County, New York, is a good case in point and is discussed by Conklin. 16/ Orange County is in the lower Hudson Valley, with its center about 50 miles from New York City. The total population in Orange County increased 21 percent during the decade of the 1960's but still remains at an average of only 266 persons per square mile. There are two small cities and many villages within the county. The 1969 Census of Agriculture counted 925 commercial farms.

In the Fall of 1974 a new set of assessed values was employed throughout Orange County roughly doubling taxes on farmland, but approximately maintaining the assessments on urban properties. After the reappraisal almost none of the farmland was assessed at less than \$1,000 per acre,

^{15/} Bryant, William R. "Farmland Preservation Alternatives in Semi-Suburban Areas," Agricultural Economics Extension 75-5, Cornell University, Ithaca, New York, April 1975.

Conklin, Howard E. "Property Tax Incentives to Preserve Farming in Areas of Urban Pressure," Property Tax Incentives for Preservation:

Use-Value Assessment and the Preservation of Farmland, Open Space, and Historic Sites. Proceedings of the 1975 Property Tax Forum, International Association of Assessing Officers, Washington, D. C., 1975, pp. 8-18.

even though the State Board of Equalization and Assessment, acting under the Agricultural District Law, had placed a farm value of \$300-\$400 per acre on most farmland in the county. The stated policy under the reappraisal was to assess on a "highest and best use" basis. Since at least some farmland had sold recently for individual houselots or subdivisions in all towns of the county, this use was considered highest and best. The new tax bills came out at an average of about \$50 per acre of farmland. Soon after the reappraisal, nearly all full-time farms in Orange County were placed in agricultural districts, and almost all farmers with land that qualified asked for a use-value assessment.

Very little farmland is being sold at the present time in Orange County. Several foreclosure actions are pending against speculators and developers who bought acreages prior to the reappraisal program and the economic recession. 17/ If there had been no use-value assessment, the areas probably would have remained semi-rural in character due to the recent declines in population growth rates, rapid rises in the costs of commuting relative to other costs, and high construction costs of single-family dwelling units. However, farming would no longer have been a viable industry in the county at \$50-\$75 an acre taxes.

Thus, it seems apparent that real estate taxes, in conjunction with other restrictions, can force farmers to discontinue farming. Taxes of more than \$25 per acre in most New York dairy and field crop areas probably are high enough to discourage farmers from making the continuous improvements in their operations that are necessary for competitive survival. On the other hand, it seems equally apparent that to reduce real estate taxes to zero would not move farmland owners to decline high offers for their land when these offers are real and present.

It is important to recognize, then, that the Agricultural District Law can only be effective in retaining agricultural land in production in the semi-rural areas. The most typical condition for a farmer to find himself in semi-rural areas is one where some land in his neighborhood is selling for enough so he would be willing to accept a comparable offer on his whole farm, but in which a realistic appraisal of the situation indicates no chance for total urbanization for many years. In other words, many farmers have some chance for an attractive non-farm sale, but this chance is much lower than certainty. Should a farmer continue to make the investments necessary for staying in farming, investments that would not increase the non-farm sale price, or should he hope for a non-farm sale, knowing that an inefficient farm in an urbanizing area will sell for a low price if it cannot be sold to a nonfarmer? If taxes are rising and the non-farmers already in the area are threatening to pass ordinances that would inhibit farming, he will be more likely to bet on a non-farm sale. But if he is assured that taxes will be assessed at use-values and if he can gain some assurance that inhibiting ordinances and other like problems will not multiply, he is more likely to bet on continued farming.

^{17/} Tyran, Trudy. "Orange Land: The Bloom is off the Boom," <u>Times</u>
<u>Herald Record</u>, Middletown, New York, July 14, 1974.

The rapid formation of agricultural districts in the semi-rural areas of New York suggests that farmers tend to be fairly realistic in their estimates of a chance for a non-farm sale. 18/ They probably also have learned by observation and some private estimations that it is somewhat risky and very expensive to relocate a farm business and reestablish business connections in a new area. What looks like a high price for frontage, certainly can be an illusion because the remaining land often may have little value for either farming or a non-farm sale.

These aspects of the farmer's situation and point of view suggest that those who wish to restrict urban scatteration for whatever reason may be able to accomplish their objectives in part through reducing elements that are viewed as threats by farmers in urbanizing areas.

On the contrary, when the chance for a non-farm sale at a satisfactory price is very high, apparently neither use-value assessment nor any combination of incentives so far tried will lure farmers into further committing themselves to farming by making the new investments needed in farm real estate improvements. No set of non-monetary incentives, apparently, can preserve farms as city parks nor hold back the urban tide when it is advancing on a solid front. 19/

Many writers have assumed that if use-value assessment fails at this point it fails totally. This is tantamount to assuming that all areas into which some urban uses have penetrated will soon be "wall-to-wall city;" to assuming that an intermingled pattern of urban and farm uses either cannot or should not be sustained.

The sharply different population trends that came on the scene in many areas of the Northeast, including New York, about 1970 now highlight the impossibility, at least for a long time, of suburbanizing all of the areas in this region where speculators, reassessment consultants, and some very sober economists recently thought residences and shopping centers were the "highest and best use." There seems there was never a

化电路电路电路电路电路电路电路电路电路

^{18/} This is not to say that closer to urban centers farmers are realistic as to the expectations for development or at least a sale at urban use values. We suspect New York farmers are as susceptible to this bias as other landowners in the urban rings that are five to ten times the size of the developed urban area. See Allee, et. al. 1985 Report, op. cit. and David Hansen and S. I. Schwartz, "Land Owner Behavior at the Rural-Urban Fringe in Response to Preferential Property Taxation," Land Economics 51(1975):341-54. Also see William H. King, Land Ownership Characteristics in Goshen, New York, A. E. Res. 77-2, Dept. of Agricultural Economics, Cornell University, March 1977.

^{19/} Some students of the urban form seem to conclude that only very drastic measures will be successful in rationalizing urban growth. Others appear content with the incremental trend that exists and have suggestions for further incremental steps. See, for examples of both points of view, Lowdon Wingo, Editor, Reform as Reorganization, (Resources for the Future and the Johns Hopkins Press, 1974).

chance, even with the old population trends, that we could have total suburbia in all areas into which some urban uses had penetrated. Now it seems clear that semi-rural conditions will remain with us long enough to justify conscious planning with this in mind.

The goal of many environmentalists to stop growth has been achieved in practically every metropolis of the Northeast. No land use policy mechanism appears to have contributed to this achievement. Population growth does continue outside the metropolitan areas, however, on a generally modest scale. And some of this growth appears to be related to agriculture.

It seems important in this connection to emphasize the differences between what it takes to promote continued agriculture and actions that can lead to other types of "open space." In New York, land left idle returns by itself to weeds and brush, and finally to woodland trees. No investments are needed for a return to this type of "natural" state. On the other hand, keeping land open, valuable for visual esthetics and most wildlife purposes, can only be done at a cost.

If a return to a woodland environment is desired, then it appears any action that encourages farming must be judged inimical. If brush, weeds, and non-selected woodland trees are compared with farming as equally valuable open space, then encouragements to agriculture apparently are neither better nor worse than simply discouraging any use. 20/

Summary

New York's Agricultural District Law has been accepted in many rural and semi-rural areas of the state. Although its main provision is usevalue assessment, it also has provisions that make it unique and more effective when compared to other states' use-value assessment laws. The law is aimed at providing an economic, political and psychological environment necessary for a strong agriculture sector to survive in areas where the impacts of urban growth are felt -- though complete suburbanization cannot reasonably be expected for several years in the future, if ever. In essence, then, the provisions of this law are directed at preserving farming in the semi-rural areas rather than a technique to control growth on farmland adjacent to city centers.

n de la companya de la co La companya de la co

The second of th

nazione dell'estratori di la companya di la company

^{20/} Lesher, William G. An Analysis of Northeastern Rural Land Use Policies, unpublished Ph.D. Thesis, Dept. of Agricultural Economics. Cornell University, 1977. Court of the second of the second of the second of

References

art petilita da dago.

- Allee, D. J., et. al. Toward the Year 1985: The Conversion of Land to Urban Use in New York State, Special Series No. 8 (New York State College of Agriculture, 1970).
- Ball, John. Patterns of Agricultural District Formation in Columbia

 County, New York. Staff Paper No. 77-3 (Dept. of Agricultural

 Economics, Cornell University, January 1977)
- Bryant, William R. <u>Farmland Preservation Alternatives in Semi-Suburban</u>
 <u>Areas</u>. A. E. Ext. 75-5 (Dept. of Agricultural Economics, Cornell University, April 1975).
- Conklin, Howard E. "Property Tax Incentives to Preserve Farming in Areas of Urban Pressure," Property Tax Incentives for Preservation:

 <u>Use-Value Assessment and the Preservation of Farmland, Open Space, and Historic Sites.</u> Proceedings of the 1975 Property Tax Forum,

 International Association of Assessing Officers, Washington, D. C.,
 1975.
- and Richard Dymsza. Maintaining Viable Agriculture in Areas of Urban Expansion. (New York State Office of Planning Services, Albany, New York, 1972).
- Council on Environmental Quality. "Untaxing Open Space" (Washington, D. C., April 1976).
- Dhillon, Pritnam S. and Donn A. Derr. "A Critical Mass of Agriculture and the Maintenance of Production Open Space," <u>Journal of the Northeast Agricultural Economics Council</u>, Vol. 3 (May 1974).
- Hansen, David and S. I. Schwartz. "Land Owner Behavior at the Rural-Urban Fringe in Response to Preferential Property Taxation," <u>Land</u> <u>Economics</u> 51(1975):341-54.
- King, William H. <u>Land Ownership Characteristics in Goshen, New York</u>, A. E. Res. 77-2 (Dept. of Agricultural Economics, Cornell University, March 1977).
- Lesher, William G. An Analysis of Northeastern Rural Land Use Policies, unpublished Ph.D. Thesis (Dept. of Agricultural Economics, Cornell University, 1977).
- Land Use Legislation in the Northeast, A. E. Res. 75-23 (Dept. of Agricultural Economics, Cornell University, December 1975).
- Locken, Gordon S. Alternative Methods of Estimating the Use-Value of

 Farmland in New York State, unpublished M.S. Thesis (Dept. of Agricultural Economics, Cornell University, 1976).
- New York State Agricultural Resources Commission. "Reports on Agricultural District Status" (mimeographed). Dept. of Agriculture and Markets, Albany, New York.

- Schmid, A. Allan. Converting Land from Rural to Urban Uses (Resources For the Future and the Johns Hopkins Press, 1968).
- Tyran, Trudy. "Orange Land: The Bloom is off the Boom," Times Herald Record, Middletown, New York, July 14, 1974.
- Wingo, Lowdon, Editor. Reform as Reorganization (Resources For the Future and the Johns Hopkins Press, 1974).

garbelan in teach for the local line was a journal to the word for the contract of the second of

Communication of the state of t

and the strain of the control of the