

A COMPARATIVE ASSESSMENT OF
PURCHASE OF DEVELOPMENT RIGHTS (PDR)
AND
TRANSFER OF DEVELOPMENT RIGHTS (TDR)
AS TOOLS FOR THE PRESERVATION OF AGRICULTURAL LAND

by

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Chapter I

INTRODUCTION

The history of the United States is a history of growth - growth from an undeveloped colony of a foreign empire to an industrialized and developed world superpower. This growth has occurred largely because of our nation's ability to exploit our own domestic resources and the resources of other nations to our own best advantage. The success of our nation's efforts in this area are unparalleled in human history, and may be attributable to a long-standing belief held by many Americans in the doctrine of growth at whatever cost.

Belief in the doctrine of growth at whatever cost was softened considerably during the environmental decade of the 1970's, when many of the environmental problems associated with the doctrine were exposed to the American public. Exposure of the environmental costs of growth has resulted in increased public awareness of the environment and, in many cases, public demands that environmental considerations be given due consideration along side of growth considerations.

Among the environmental problems exposed during the 1970's was the problem of agricultural land conversion. For

a long time the conversion of agricultural lands was something that was taken for granted--land was needed for new construction, and farmland just happened to be both physically suited for new construction and in great enough supply so that farmland losses were viewed as being inconsequential. But increasing awareness of the environmental and economic significance of farmland (along with many other factors) led to a change in this attitude, a change which has been reflected by the increasing prominence of Federal, state, local and private farmland preservation activities.

This paper concerns itself with the problem of agricultural land conversion and two of the more recently popular responses to the problem: purchase of development rights (PDR) and transfer of development rights (TDR). First, the scope of the agricultural land conversion problem is laid out and responses to the problem briefly summarized. Next, PDR and TDR are examined as tools for the preservation of agricultural land from both theoretical and case study perspectives. PDR and TDR are then compared in terms of legal, economic, administrative and political considerations. Finally, the paper concludes with summary and conclusions regarding the use of PDR and TDR as tools for the preservation of agricultural land.

Chapter II

THE PROBLEM OF AGRICULTURAL LAND CONVERSION

2.1 SCOPE OF THE PROBLEM

Few nations in the world are endowed with as abundant and diverse a supply of natural resources as is the United States. Over time our natural resources have played no small part in strengthening our nation, both domestically and internationally. Although our resources are still in relatively abundant supply there have been forebodings of future resource scarcity. Agricultural land, at present one of our most abundant natural resources, is one resource for which the alarm has been sounded. Uncomfortably high rates of conversion of agricultural lands have served to focus attention on a problem which has long been ignored.

The term "agricultural land conversion" denotes a change in land use from agriculture to some other use, often a more intensive one. Typically, the more intensive use is residential development, as what are generally inherent characteristics of farmland (fairly level, productive and stable soils, easy workability, good drainage) make such lands eminently suited for residential development. Conversion from agricultural to more intensive uses does not always occur immediately upon cessation of farming, and

sometimes does not occur at all. Often an idle period follows the cessation of farming activity, up until a time when the landowner decides development or sale is prudent. In some cases, such as upon the death of the farmer in a rural area, idle farmland converts to forest because of the unwillingness of the heirs to continue the farming operation themselves or their inability to find someone to continue it for them.

2.1.1 Conversion Estimates

Agricultural land conversion figures are somewhat confusing, although not deceptively so. Confusion results primarily from the lack of an adequate methodology for measuring conversion losses, along with the lack of an adequate data base from which to work. The figures most frequently cited are from a U.S. Department of Agriculture Soil Conservation Service (SCS) study published in 1977.¹ In this report it was estimated that between three and five million acres per year of farmland are converted to non-agricultural uses, of which 760,000 acres is prime farmland. This estimate takes into consideration land isolated by leap frog development, land which SCS officials felt should not

¹Raymond Dideriksen, Allen B. Hidlebaugh and Keith O. Schumde, Potential Cropland Study (Washington, D.C.: USDA-SCS, [1977]).

be counted as part of the cropland reserve.² When a comparison is made between yearly conversion estimates and the supply of U.S. cropland (400 million acres in 1975 with another 111 million acres in non-agricultural use with high or medium potential for conversion to cropland)³ the magnitude of conversion with respect to total cropland available (actual and potential) may be seen.

A particularly disturbing aspect of agricultural land conversion is the conversion of prime farmlands. These farmlands are composed of class I and II soils, the top two capability classes with respect to agricultural suitability and productivity. Prime farmlands are defined by SCS as follows:♦

Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oil-seed crops, and is also available for these uses (the land could be cropland, pastureland, rangeland, forest land, or other land, but not urban built-up land or water). It has the soil quality, growing season, and moisture supply needed to economically produce sustained high yields of crops. In general, prime farmlands have an adequate and dependable water supply from

²Charles E. Little, ed., Land and Food: The Preservation of U.S. Farmland (Washington, D.C.: American Land Forum, 1979), p. 12.

³U.S. General Accounting Office (USGAO). Preserving America's Farmland - A Goal the Federal Government Should Support (Washington, D.C.: USGAO, [1979]), p. 3, citing USDA-SCS Potential Cropland Study.

♦USGAO, p. 2.

precipitation or irrigation, a favorable temperature and growing season, and few or no rocks. Prime farmlands are not excessively erodible or saturated with water for a long period of time, and they either do not flood frequently or are protected from flooding.

Prime farmlands are our most valuable farmland resource; they yield proportionally higher returns per unit of input than non-prime farmlands. But the problem with prime farmlands is that many are situated in close proximity to urbanizing areas. A 1977 study by the Regional Science Research Institute of Philadelphia contained the statistic that the 16.7 percent of the nation's land that is in Standard Metropolitan Statistical Area (SMSA) counties contains 20.2 percent of the land in soil capability classes I and II.⁵ The same study also concluded that a moderate but significant bias exists in the location of urban populations in the vicinity of our prime farmlands.⁶ Thus, many acres of our best agricultural lands are directly in the path of urban expansion, and they end up as part of our nation's estimated 760,000 acre annual loss of prime farmland.⁷

⁵Daniel R. Vining, Kenneth Bieri and Anne Strauss, Urbanization of Prime Agricultural Land in the United States: A Statistical Analysis (Philadelphia: Regional Science Research Institute, [1977]), p. 8.

⁶Vining, p. 32.

⁷Potential Cropland Study.

2.1.2 Causes of Conversion

Research into the causes of agricultural land conversion is lacking. A look at various programs for agricultural land preservation would suggest that economic factors play a major role in the decision to convert. High assessments and concomitantly high taxes are most frequently mentioned. Decreasing productivity, increasing production costs and the desire of the farmer to capitalize on increases in the value of his/her land are also mentioned as being contributing factors in the decision to convert. Yet there are other factors of a non-economic nature contributing to the decision to convert, some of which may be offset through preservation programs and others which can either be dealt with through other programs (e.g., police patrols to deter farm vandalism) or cannot be dealt with at all (e.g., the desire of the farmer to escape from the pressures of urbanization). Some factors of a non-economic nature which may contribute to the decision of whether or not to sell out include the following:

- retirement or death of the farmer.
- farm vandalism from new residents.
- national, state and local environmental regulations.
- water supply problems.
- crop losses from air pollution.

- traffic congestion.
- desires to operate a farm in a more rural setting.
- inability to locate farm help.
- desires for a change in lifestyle.
- difficulties in purchasing specialized equipment or replacement parts, farm supplies and services.

These factors, in combination with the previously mentioned economic factors, make the task of farmland preservation a difficult one, and one for which a simple solution is likely not to be found.

2.1.3 Problems of Conversion

Inherent in the effort to protect and preserve farmland is the belief that conversion poses a threat to our nation's well-being, both at home and abroad. This belief is based on numerous factors, some well documented and others not so. An examination of these factors should provide some insight into the conversion threat.

There are two methods of increasing food supplies. One is by increasing yields and the other is by increasing the cropland area.* Dealing first with the latter, as previously mentioned, SCS has estimated that 111 million acres of non-agricultural land has either high (seventy-eight million acres) or medium (thirty-three million acres) potential for -----

*Little, p. 23.

conversion to cropland.⁹ Of the seventy-eight million acres with high conversion potential thirty-five million acres could be converted to cropland simply by beginning tillage, whereas forty-three million acres would require the installation of relatively inexpensive conservation practices before conversion could take place.¹⁰ The thirty-three million acres of medium potential land, on the other hand, would require significant investments in conservation practices and development measures to make them suitable for cropland.¹¹

The problem with these estimates is that they do not take into account factors other than inherent suitability for production, i.e., they ignore crop price levels as well as ownership preferences. A survey of sixty owners of 739,840 acres of cropland reserve in North Dakota revealed that fifty-seven percent of this reserve would not be converted regardless of crop price levels.¹² The survey also revealed that conversion of thirty-three percent of the land held by these owners would depend on future price relationships between crops and livestock and/or higher crop price levels.

⁹USGAO, p. 58.

¹⁰USGAO, p. 58.

¹¹USGAO, p. 58.

¹²USGAO, p. 61.

Conversion of the remaining ten percent of the land was being considered at current crop price levels. Thus, some doubt exists as to the true level of cropland reserve, and the above quoted study seems to suggest that our reserve may be far less than we believe it to be.

The second method of increasing food supply is to increase yields. Technological developments affecting agricultural production such as the development of high yield hybrids and double cropping practices have contributed to an increase in yields per acre over time. In recent years, however, there has been increasing concern over our ability to continue increasing agricultural yields. Cited as reasons for concern are the following:

- climatic changes. Climatologists believe that increases in yields-per-acre over the past few decades owed as much to unusually favorable weather conditions as to more widespread application of agricultural technology.¹³ Possible future changes in climate due to cyclical fluctuations in weather patterns could cause yields to decrease rather than increase.
 - technological limitations. The idea that the technology to increase yields has been exhausted is occasionally advanced. If this is not the case, does the benefit accrued from technological changes outweigh the cost of such changes on a per unit basis?
 - land degradation. Soil erosion has been and will continue to be an especially troublesome farm problem. One estimate places the annual acre-
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¹³Little, p. 24.

equivalent productivity losses of cropland due to soil erosion at three million acres per year.¹⁴

- air pollution. A wealth of research links air pollution to crop damage.¹⁵ Pollution damage is prevalent both in areas proximate to and far removed from urbanization.
- energy costs. Because natural gas is the raw material used in producing ammonia and ultimately in producing nitrogen fertilizer,¹⁶ increases in the price of natural gas could drive the price of nitrogen fertilizer out of the price range of most farmers.

Thus, the future role of yield increases as compensation for productivity lost as a result of conversion is clouded, although at present the belief that yields have leveled off is not widely accepted.¹⁷

In parts of the country, particularly in the mid-west, agriculture is heavily dependent upon irrigation. As more farms locate in such areas the strain upon the area's water supply increases. An example is west-central Kansas, where demands upon the area's underlying aquifer decreased the saturated thickness from fifty-eight feet to eight feet between 1930 and 1977.¹⁸ When such a situation occurs it

¹⁴Little, p. 25.

¹⁵Little, p. 25.

¹⁶USGAO, p. 21.

¹⁷See USGAO, Appendix 1. This is a letter from USDA to USGAO in which USDA requested that USGAO delete from its draft report a heading which stated "Productivity yields have leveled off."

generally translates into less water available for the farmer at greater cost, which, in turn, means higher product costs for the consumer. Retention of existing productive farmland in areas where rainfall is abundant could help to minimize the effects of these changes.¹⁹

The energy aspects of agricultural land conversion have been fairly well publicized in recent years. Irrigation farming is a particularly energy-intensive activity, the energy costs of which are substantially higher than those for dryland farming. A U.S. Department of Agriculture study of these costs revealed the energy costs per bushel for irrigation farming to be nearly double those of dryland farming (\$0.73 as opposed to \$0.38).²⁰ A similar study by the University of Nebraska showed that dryland farming required 40.57 gallons of diesel fuel per acre of corn while irrigation farming required 90.3 gallons per acre.²¹

Although a specific empirical basis for the conclusion appears to be lacking at this time, it is generally conceded that less fertile land brought into production to replace

¹⁸USGAO, p. 19.

¹⁹USGAO, p. 16.

²⁰U.S. Department of Agriculture - Economic Research Service (USDA-ERS), "Farmer Adjustments to Higher Energy Prices" (Washington, D.C.: USDA-ERS, ERS-663, November [1977]).

²¹USGAO, p. 20.

fertile farmland converted to other uses will require higher levels of fertilizer in order to obtain high crop production.²² As previously pointed out, the production of fertilizer requires the input of ammonia, which is obtained from natural gas. It can be expected that both the demand for and price of fertilizer will increase, as more and more farm operations are forced onto marginally productive lands.

World demand for U.S. agricultural products has never been higher. In economic terms the U.S. had a net agricultural trade surplus in 1978 of \$13.4 billion.²³ Agricultural exports have become an extremely important factor in helping to offset U.S. trade deficits incurred because of oil imports, and to protect against runaway devaluation of the dollar.²⁴ Yet the very base of our strength which permits us to enjoy our favorable trade position--our large supply of productive agricultural land--is being chipped away. These farmland losses will only serve to erode our nation's international economic base, and will make it more difficult for our nation to positively contribute to the problem of world hunger.

²²USGAO, p. 21.

²³Little, p. 26.

²⁴Little, p. 26.

Agricultural land conversion can only hurt the American consumer. The economic costs of conversion (increases in the cost of farmland, property taxes, fertilizer, irrigation water, etc.) are passed on to the consumer through the price of farm commodities. In addition, residents of an area in which farmland is being converted to more intensive uses most often must share in the costs of such development--increased school budgets, capital improvement projects for community infrastructure, increased congestion, environmental problems, and many other tangible and intangible costs. The tendency is that such development rarely pays for itself and ultimately benefits few to the disadvantage of many.²⁵

Of all the reasons why agricultural land conversion is an important issue, perhaps none is as significant as the threat it poses to farming as a way of life. The relationship between conversion pressures and tax levies is fairly clear: conversion pressures prompt higher land assessments, which in turn mean higher tax levies. But what is less clear is the overall sequence of events in the conversion of agricultural land. The process of conversion is delineated by one observer in the following manner:²⁶

²⁵See Real Estate Research Corporation. The Costs of Sprawl (Washington, D.C.: Council on Environmental Quality, 1974).

First, land prices increase as speculators begin to recognize the development potential of an area. Then farmers, well aware of what is happening, become reluctant to invest in major, long term improvements for their farms. This, in turn, may adversely affect the local farm support industries, which may be forced to relocate or go out of business. By the time early, scattered subdivisions appear, the local agricultural infrastructure may already have been severely weakened.

Speculation in farmland has been the primary reason why, in recent years, the price of farmland has been increasing at a rate two and one-half times that of inflation.²⁷ This speculation has been promoted through favorable tax laws, which provide for sheltered investments, and by fear of inflation, which prompts investors to look for stable investments.²⁸ Land investment for speculative and tax purposes is not limited to urban-rural fringe areas; it is also prevalent in remote farming areas. Thus, speculation tends to be widespread, with the most extreme effects occurring in the urban-rural fringe.

The non-economic effects of conversion upon the farmer generally receive less attention than do the economic effects of conversion. Factors such as vandalism from the children of newly arrived residents and ordinances

²⁶Little, p. 16.

²⁷Little, p. 47.

²⁸Little, p. 47.

promulgated by urban dominated state and local legislative bodies weigh heavily upon the farmer. In many cases the net effect of the combination of economic and non-economic factors is to make the farmer feel alienated and out of place. Under such circumstances the farmer may feel it necessary to move his operation to a more rural setting or to abandon his farming livelihood altogether.

2.2 RESPONSES TO THE PROBLEM

Concern over the conversion of agricultural lands has prompted numerous responses from both the public and private sectors, the aim of such responses being the maintenance of productive agricultural lands in active agricultural use. Generally speaking, these responses fall into two categories: indirect and direct. Indirect responses are those which operate to affect the supply of agricultural land through provisions in the tax code. Direct responses are those which operate to affect the supply of agricultural land through direct government regulation and/or other affirmative actions (e.g., development rights purchase). The former are by far the most prominent, although they are not necessarily the most effective.

2.2.1 Indirect Responses

There are four indirect measures mentioned in the literature, all of which operate through the tax code. The most widely adopted measure, preferential property assessment and taxation, is in use in almost all states.²⁹ The other measures, circuit breaker state income tax credits, inheritance and estate taxation, and land gains taxation, are in use in only a handful of states. Consequently, most of the literature on indirect measures for agricultural land preservation is concerned with preferential property assessment and taxation.

Although quite popular among landowners, preferential property assessment and taxation schemes appear to be only marginally effective in helping to preserve agricultural land. One widely quoted study concluded in part that differential assessment and taxation schemes are an inefficient and expensive tool for achieving land use objectives.³⁰ In fact, it appears on the surface that these programs are more noted in the literature for their flaws

²⁹Joe Belden and Bob Davies, A Survey of State Programs to Preserve Farmland (Washington, D.C.: Council on Environmental Quality, [1979]), p. 4. Forty-eight states are listed as having one or more types of preferential assessment schemes in operation.

³⁰John C. Keene et al., Untaxing Open Space: An Evaluation of the Effectiveness of Differential Assessment of Farm and Open Space: Executive Summary (Washington, D.C.: Council on Environmental Quality, 1976), p. 3.

than for their positive attributes.

Because of the general ineffectiveness of preferential assessment and taxation schemes in helping to preserve agricultural land, more attention has been focused in recent years upon the use of other types of responses. In particular, ever increasing attention is being paid to the use of more direct responses.

2.2.2 Direct Responses

Five direct measures are most commonly mentioned in the literature; they are agricultural districting, agricultural zoning, land banking, purchase of development rights (PDR) and transfer of development rights (TDR). All involve some affirmative government role, whether that role be approval of the formation of special agricultural districts or zones or the expenditure of public funds for the purchase of absolute fee title or development rights to agricultural land.

Among the aforementioned direct approaches, PDR and TDR have been receiving the most attention. Both are essentially compensatory zoning techniques--in each case the landowner receives compensation for having his/her land classified a certain way (e.g., agricultural preserve). The attention given to these techniques most likely has arisen because PDR

and TDR enable the landowner to capitalize on increases in the value of his/her land, while at the same time preserving the land in a more permanent sense than do other techniques.

Chapter III

PURCHASE OF DEVELOPMENT RIGHTS (PDR)

3.1 PDR AS A TOOL FOR AGRICULTURAL LAND PRESERVATION

As was reviewed in the preceding chapter, agricultural land conversion is a problem of immense proportions. After nearly twenty-five years of organized efforts on the part of state and local governments to deal with the problem,¹ some progress appears to have been made. But a general consensus exists that much remains to be accomplished, and, indeed, much activity is occurring today in the way of experimentation with alternative tools for agricultural land preservation.

Recently, substantial interest has been shown in the use of compensatory tools for agricultural land preservation. These tools stand middle-ground between philosophical extremes in land use control (laissez-faire v. absolute public regulatory control), the gist of such tools being more absolute control in exchange for various forms of compensation. Purchase of development rights, one such tool, is the subject of this chapter.

¹Maryland may very well have been the first state to act with regard to the problem of conversion when, in 1956, the state adopted use-value assessment for farmland.

3.1.1 Definition and Development of the Concept

There is no set definition of PDR, per se. The concept of PDR is based on the recognition that ownership of land consists of a "bundle of rights," of which only one is the right to develop it (subject, of course, to any regulations imposed through the police power of government).² The acquisition of development rights consists of severing from the absolute fee title the right to develop the land, leaving the owner in possession of the remainder of the fee title, which would include the right to use the land for other purposes and the right to sell or bequeath it.³ The development rights which are severed from the fee "do not possess a clearly defined character in property law,"⁴ and thus elude a rigid definition.⁵ There is a need, then, in each case where PDR is utilized to clearly define the rights changing hands.

²Robert E. Coughlin and Thomas Plaut, "Less-than-fee Acquisition for the Preservation of Open Space: Does It Work?," Journal of the American Institute of Planners 44 (October 1978): 453.

³Coughlin and Plaut, p. 453.

⁴Craig A. Peterson and Claire McCarthy, "Farmland Preservation By Purchase Of Development Rights: The Long Island Experiment," DePaul Law Review 26 (Spring 1977): 449, citing Krasnowiecki and Strong, "Compensable Regulations for Open Space, a Means of Controlling Urban Growth," Journal of the American Institute of Planners 29 (May 1963): 91.

⁵Peterson and McCarthy, p. 449.

The idea that the right to develop land could be severed from the land itself is of relatively recent origin, although there is at least one early reference to the idea.⁶ In many ways the severability of the development rights to land is analogous to the severability of water, air, and mineral rights. Although the owner relinquishes title to those rights, he still retains title to other rights in the "bundle of rights" accompanying fee ownership. Conceptually, however, full fee ownership is lost when any one of the rights of the "bundle of rights" is transferred in ownership to another party.

3.1.2 Implementation Considerations

PDR program implementation may be divided into two functional phases: acquisition and administration.⁷ The former phase involves getting the program ready to operate and getting it operating, while the latter phase involves keeping the program operating. Delineation of these two

⁶David F. Newton and Molly Boast, "Preservation by Contract: Public Purchase of Development Rights in Farmland," Columbia Journal of Environmental Law 4 (Spring 1978): 195, citing State ex rel. Twin City Bldg. & Inv. Co. v. Houghton, 144 Minn. 13, 176 N.W. 159 (1920), in which a statute enabling cities to establish restricted residential districts and to acquire by eminent domain the right to develop for other purposes the properties included in the districts, was held constitutional.

⁷Peterson and McCarthy, p. 451.

phases is imprecise, as many activities overlap between the phases.

Many issues and problems are inherent in the acquisition phase of PDR program implementation, and sooner or later it becomes necessary to take these issues and problems into consideration. Among the issues and problems inherent in the acquisition phase are the following:⁸

1. Identification of the level of government that should be primarily responsible for plan. The level of government identified should have adequate resources (fiscal, personnel) with which to plan and a broad scope of available powers for plan implementation.
2. Constitutional, home rule, and enabling act mandates and possibilities. A check of state and local statutes should be made to ascertain the legality of a PDR approach to farmland preservation.
3. Common law and statutory problems in defining the interest to be purchased. Enactments and instruments should define carefully "development right," being very specific as to the rights taken and the rights retained, with special attention to the terms "agriculture" and "agricultural uses."⁹
4. Constraints related to political attitudes. Does political support exist for a PDR program?
5. Role of citizens in decision-making process. Citizens should be afforded the opportunity to participate in selection of a preservation program and in the implementation of the selected alternative.

⁸Peterson and McCarthy, p. 451.

⁹Peterson and McCarthy, p. 467.

6. Identification of alternative and supplemental programs of farmland preservation. Given the complexity and expense of PDR, a full range of alternative preservation programs should be identified and investigated. Consideration should be given to the use of supplemental programs to enhance the effectiveness of PDR.
7. Selection of purchase criteria.
8. Decision as to voluntary elements of program and whether condemnation will be authorized. If condemnation of development rights is to be authorized, then under what circumstances should it be used?
9. Degree to which procedures and standards will be articulated in the statutes and ordinances, as opposed to administrative regulations. PDR program procedures and standards should not be too rigidly defined in statute and ordinance. Some flexibility should be built into the program to allow for minor adjustments as needed.
10. Possible range of payment alternatives. Attempts should be made to formulate payment schemes which minimize the tax impact of development rights sale upon the landowner.

The administration phase of PDR program implementation is also complicated by issues and problems, including the following:¹⁰

1. Proper level of detail in legislative enactments to provide certainty without undue rigidity.
2. Establishment of fair, workable, written procedures that are understandable. Procedures would need to be detailed for development rights bidding, property appraisal, sale contracts, property deeds, and purchase options.

¹⁰Peterson and McCarthy, p. 451.

3. Articulation of standards for exercises of governmental discretion.
4. Development of enforcement mechanisms. The public's interest in publicly purchased development rights to farmland must be secured against potential deviations from the purchase agreement by current or future owners of the underlying title.
5. Establishment of provisions respecting possible disposition of development rights. Should conditions change sufficiently, there should be some set method of disposing of development rights purchased.
6. Selection of existing or new agencies to administer the program.
7. Identification of manpower, staff requirements, and administration board commitments. The staff resources necessary to operationalize the PDR program must be identified and retained.

PDR program experience in the United States is sparse. There are presently five states and three counties in this country¹¹ which have either established PDR programs or adopted legislative provisions for the purchase of development rights.¹² Among operational programs, the Suffolk County, N.Y., PDR program is the most well established and most successful. It thus serves as the best

¹¹The five states are Connecticut, Massachusetts, New Hampshire, Maine, and Maryland. The three counties are King County, WA; Suffolk County, N.Y.; and Howard County, MD.

¹²Dennis A. White, "Considerations in the Use of Purchase of Development Rights to Preserve Farmland" (paper presented at the Conference on Rural Preservation, November 1979, Fredericksburg, Virginia).

example, to date, of the use of PDR as a tool for agricultural land preservation.

3.2 CASE STUDY: SUFFOLK COUNTY, NEW YORK

Suffolk County, New York, is a suburban-rural county located within the greater New York City metropolitan area. It extends approximately ninety miles eastward from its western boundary, the Nassau County line (approximately twenty-five miles from the New York City line), to Montauk Point, the very eastern tip of Long Island. It is bounded to the north by Long Island Sound, and to the south by Great South Bay and the Atlantic Ocean. Nowhere in the county does the distance between north and south exceed twenty-five miles.

Over the past forty years, Suffolk County's population has skyrocketed from approximately 200,000 in 1940 to over 1,700,000 today.¹³ Most of this population growth has been concentrated in the County's five western towns, which contain about ninety-two percent of the County's population but only sixty-four percent of the County's 677,000 acres of land area.¹⁴ The growth which has occurred has occurred

¹³David F. Newton, "Saving Prime Farmland: The Suffolk County Experience" (Riverhead, N.Y.: Suffolk County Cooperative Extension, December, 1979), p. 1. (Mimeographed.)

¹⁴See David F. Newton, "Suffolk County's Farmland

largely at the expense of farmland and other open space lands in Western Suffolk and, to a lesser extent, at the expense of such lands in Eastern Suffolk.¹⁵ Growth continues today, albeit recession in the economy has acted to slow the rate of growth considerably.

3.2.1 Farmland Conversion in Suffolk County

The past thirty years in Suffolk County have been marked by a tremendous decline in the number of acres of land in farm use. A peak was reached in 1950, when 123,000 acres were in farm use for growing potatoes, vegetables, sod, nursery stock and fruit, and for raising poultry and other livestock. Since that time, however, the supply of farmland has declined to the point today where less than half of the farm acreage in use then is still in use (approximately 50,000 acres currently).¹⁶ Of the acreage in farm use today, over ninety percent is located in Eastern Suffolk,¹⁷ as -----

Preservation Program" (Riverhead, N.Y.: Suffolk County Cooperative Extension, September, [1979]), n.p.. (Mimeographed.) Newton gives the figure here of 677,000 acres as Suffolk County's total land area. In Klein (p. 7) the total land area for Suffolk County's five eastern towns adds to 241,630 acres, thus making the total land area for the western towns $677,000 - 241,630 = 435,370$ acres. Dividing this figure into the total County land area produces the sixty-four percent figure.

¹⁵Eastern Suffolk has long been a popular resort area and location for second-home development.

¹⁶Newton (December 1979), p. 1.

suburbanization has all but obliterated agriculture in Western Suffolk.

The case for farmland preservation in Suffolk County is a strong one. In economic terms the County's agricultural products generate \$70,000,000 annually in income for local farm operators, which makes Suffolk County New York State's leading agricultural county.¹⁸ Portions of this income, in turn, are spent locally in purchasing equipment and supplies from local agribusinesses, and in the payment of wages to farm workers. Environmentally, the County's farmlands serve dual purpose as open space for aesthetic purposes and open space for aquifer recharge. The latter purpose is particularly crucial, as the County is totally dependent upon the underlying aquifer for its fresh water needs. Socially, culturally and historically the County and its residents have ties to the land. Agricultural land conversion poses a serious threat to these ties, as it also poses a threat to the County's agricultural economy and natural environment.

¹⁷Newton (December 1979), p. 1.

¹⁸Press release. Office of County Executive John V.N. Klein, Hauppauge, N.Y., 29 September 1977.

3.2.2 Suffolk County's Response

Initial responses by Suffolk County to the problem of agricultural land conversion consisted of recommendations concerning the retention of an agricultural preserve in the County. The first recommendation came in The Suffolk County Planning Commission's 1964 report A Plan For Open Space In Suffolk County.¹⁹ In this report it was recommended that a minimum of 50,000 acres within the County be set aside and allocated for agricultural use.²⁰ The recommended means by which this goal was to be accomplished were town level regulatory measures, following from town comprehensive plans incorporating agricultural land preservation considerations.

Some six years after these initial recommendations were made, The Nassau-Suffolk Regional Planning Board published the Nassau-Suffolk Comprehensive Development Plan.²¹ In this plan the recommendation was made that a minimum of 30,000 acres of the most productive farmland in Eastern Suffolk be protected through public purchase and leaseback. No recommendations were made concerning the level of government to be responsible for carrying out such a program.

¹⁹Suffolk County Planning Commission (SCPC), A Plan For Open Space In Suffolk County (Hauppauge, N.Y.: SCPC, 1964).

²⁰SCPC, n.p..

²¹Nassau-Suffolk Regional Planning Board (NSRPB), Nassau-Suffolk Comprehensive Development Plan (Hauppauge, N.Y.: NSRPB, 1970).

3.2.2.1 Klein Elected County Executive

Farmland preservation efforts began to gel in Suffolk County in 1972, when John V.N. Klein took office as County Executive. A life-long resident of the County, Mr. Klein was deeply disturbed about the County's vanishing farmland. Having served witness to Western Suffolk's suburbanization, he was determined to see that Eastern Suffolk have more of a choice of potential futures. Specifically, he was concerned that the pastoral character of Eastern Suffolk would someday soon give way to developmental pressures, and he was determined to do what could be done to maintain its character.

Three months after taking office Mr. Klein appointed an Agricultural Advisory Committee (hereinafter AAC)²² to review farmland preservation alternatives and make recommendations concerning an alternative suitable to the needs of the County and its farmers. Over the next two years the AAC met officially on twelve occasions to address itself to its appointed task. A year into the AAC's deliberations a report was submitted to the County Legislature by Mr. Klein²³ which defined the scope of the

²²The AAC was composed of fourteen farmers representing different types of agri-business interests, the Farm Bureau, and three ex-officio members: the County Executive, the Director of the Suffolk County Extension Service, and a County legislator. For more on their activities, see Peterson and McCarthy, supra.

County's conversion problem, the need for action, and which set forth various alternatives for action, of which PDR was one. During the same time period the County Legislature, at Mr. Kleins' request, included a \$45,000,000 commitment of funds in its 1974-76 capital budget for the acquisition of 9,000 acres of farmlands in Eastern Suffolk.²⁴ The context for further activity having been set by Mr. Kleins' report, the AAC made its own report to the County Legislature in March of 1974.²⁵

In its report the AAC endorsed PDR as the preservation tool most suited to the needs of the farm community, and recommended that the County embark on a PDR program for farmland located in Eastern Suffolk. The AAC further recommended that the County proceed with the PDR program on the following bases:²⁶

1. Emphasis should be on the use of available funds for the acquisition of development rights as opposed to the acquisition of fee title.²⁷
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²³John V.N. Klein, "Suffolk County Farmland Preservation Program: A Report from County Executive John V.N. Klein to The Suffolk County Legislature" (Hauppauge, N.Y.: Office of the County Executive, [1973]), p. 7.

²⁴Letter accompanying Klein, *supra*, dated September 1973.

²⁵Report of the Suffolk County Agricultural Advisory Committee to the Suffolk County Legislature (March 1974) [hereinafter cited as AAC Report].

²⁶AAC Report, pp. 3-4.

2. Where feasible, the first offer to purchase development rights should relate to farmer owned and operated land and on non-farmer owned land adjacent to such land.
3. The preserved farms should form blocks of farmland, preferably a minimum of 200 acres in size.
4. Preserved farms should be buffered from any nearby residential or commercial uses by existing roads or highways, or other open spaces.
5. Development rights once purchased by the County could not be sold or otherwise transferred by the County without approval of voters in a Countywide referendum.
6. The PDR program should be on a voluntary basis; condemnation should be avoided where possible.²⁸

With regard to program procedure the AAC recommended the following:²⁹

1. The selection of areas to be preserved should be based on the following criteria:
 - a) soil suitability - class I and II soils are given priority.
 - b) present land use - land currently under cultivation is given highest priority.

²⁷The committee did not rule out the acquisition of fee title; it did feel, however, that fee title acquisition should be used sparingly and that emphasis should be placed upon the use of PDR.

²⁸Condemnation of less than fee interest is authorized under New York State law. See N.Y. GEN. MUN. LAW, Sec. 247, subsection 2 (McKinney 1972).

²⁹AAC Report, pp. 4-5.

- c) contiguity of farms - individual parcels must be adjacent or contiguous to other open farmland.
 - d) development pressure - parcels under immediate threat are given high priority, assuming they meet basic eligibility criteria.
 - e) price of land - asking price should be reasonable and realistic.
2. Bids should be solicited from farm owners in the areas chosen in the initial selection process, once such process has concluded.³⁰ These initial bids should be viewed as an expression of interest on part of the landowner, and should not be viewed as being binding upon either the landowner or the County.
 3. The landowner need not submit a bid for all of his/her acreage. By the same token, the County has the right to reject any bid it deems impractical.
 4. A special committee should be established to recommend to the County Legislature the first large areas to be selected for bid solicitation, and to make recommendations to the Legislature with respect to those properties offered for sale of development rights to the County.³¹

3.2.2.2 PDR Law Enacted

Approximately three months after the AAC presented its report, the County Legislature enacted Local Law No. 19-1974³² authorizing immediate implementation of the

³⁰In the interest of fairness, bids were solicited from all farmland owners in the County prior to the selection of parcels. This change in format came about soon after the AAC's report was submitted to the County Legislature.

³¹AAC Report, p. 5.

³²Enacted 14 June 1974.

recommended PDR program. Authorization for the use of PDR came under Section 247 of New York State Municipal Law, which authorized the acquisition of fee and less than fee interest in land for the preservation of open spaces and areas.³³

Soon after the enactment of the local law, Mr. Klein appointed a Select Committee on the Acquisition of Farmland Development Rights.³⁴ The Select Committee met three times during September and October of 1974 to develop procedures for implementing and administering the PDR program. On November 7, 1974, the Select Committee submitted a report to the County Legislature.³⁵ This report added some needed specificity to the PDR program in the areas of acquisition and general administrative matters, as neither the AAC's report nor the local law establishing the program were specific in these areas. In its report the Select Committee

³³N.Y. GEN. MUN. LAW Sec. 247, subsections 1 & 2 (McKinney 1972). Open spaces were so defined to include agricultural lands in bona fide agricultural production.

³⁴The Select Committee was composed of three legislators (one each from Western, Central and Eastern Suffolk), the County Extension Administrator, the County Planning Director, representatives from four Eastern Suffolk towns, the former Director of the Extension Service, and the County Executive. No farmers were appointed in order to avoid conflict of interest charges.

³⁵Report to the Suffolk County Legislature From the Select Committee on the Acquisition of Farmlands (November 7, 1974) [hereinafter cited as Select Committee Report].

included the following set of recommendations:³⁶

1. Bids should be solicited Countywide. In other words, bid solicitation should precede site selection. This recognizes that there are viable farmlands worthy of preservation in Western Suffolk, and that the County Legislature should have the final word on whether or not farmlands in this area should be preserved through the County's program.
 2. Bids should be solicited simultaneously. This move helps to suppress any notions that one area is favored over another for preservation.
 3. Bids should be solicited by direct mail contact to farmland owners, as other methods of contact (e.g., newspaper) will not necessarily reach all affected parties.
 4. A member of the County Attorney's staff should be available between the notification of solicitation of bids and the receipt of bids to answer questions from farmland owners.
 5. Sixty days should pass between notification of solicitation of bids and the opening of bids in order to allow the landowner adequate time to obtain any professional advice (legal, appraisal) he/she may desire. Following the opening of bids the County should enter into option (sixty day minimum) with those property owners selected by the Select Committee and the Legislature as having farmlands whose development rights should be purchased by the County. Such option would protect the County from having bids withdrawn during the County's survey, title report and appraisal of the selected properties.
 6. Payment to property owners for their land's development rights should be by installment, if the landowner so desires. Such an arrangement would help to ease the tax burden falling upon the landowner from sale of development rights.³⁷
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³⁶Select Committee Report, pp. 1-4.

7. The County Legislature should recognize that it has the final say as to the development rights to be purchased by the County. The role of the Select Committee is to recommend to the County Legislature those properties which should be included in the initial phase of the County's program, working from the selection criteria laid out by the AAC in its report.

The Select Committee also included in its report draft copies of a bid solicitation letter to be sent to farmland owners, a bid offer form, an option agreement, a purchase contract, a deed conveyance form, and an installment agreement for payment of the purchase price for development rights. Thus, most of the specifics of the PDR program were now set out for examination, albeit in somewhat preliminary form.

3.2.2.3 Farmland Development Right Bids Solicited

On December 13, 1974, letters soliciting bids on the development rights of farmland were sent to 1,450 owners of 1,800 parcels (56,000 acres) of farmland throughout the

³⁷In November of 1974, Mr. Klein requested that the Internal Revenue Service rule on an installment payment proposal to reduce the taxes which would have to be paid by landowners on the value of development rights sold. New York State law prohibited the purchase by local government of fee simple title or lesser interest in land by any method other than lump sum payment. As a consequence, Suffolk County devised a plan whereby local financial institutions would act as intermediaries between the landowner and the County, the County making lump sum payment to the institution and the institution making installment payments to the landowner.

County.³⁸ So as to more fully inform farmland owners of the PDR program in general and the bidding process in particular, the Cooperative Extension and Mr. Klein conducted eight informational meetings in January of 1975, the month prior to the scheduled month of bid opening.

Bids were opened on February 11, 1975, and the response was encouraging. A total of 382 bids were submitted covering 17,949 acres of farmland at a total cost of \$116,500,000, or \$6,490 per acre.³⁹ These bids were then filed and mapped by the County Real Property Tax Service Agency, and the information passed along to the Select Committee for their evaluation and recommendations.

The Select Committee acted quickly in evaluating the submitted bids, and on April 14, 1975, forwarded the recommendation to Mr. Klein that 13,925 acres of the total bidden be appraised and the development rights thereto acquired.⁴⁰ Shortly thereafter, Mr. Klein presented the Select Committee's recommendations to the County Legislature along with a resolution to authorize the signing of options and conducting of appraisals.⁴¹ On May 13, 1975, the County -----

³⁸Suffolk County Planning Department (SCPD), Status Sheet of the Suffolk County Farmland Preservation Program (Hauppauge, N.Y.: SCPD, n.d.). (Mimeographed.)

³⁹Status Sheet of the Suffolk County Farmland Preservation Program.

⁴⁰The bidden cost of these parcels was \$82,900,000.

Legislature approved Mr. Kleins' resolution, and the stage was set for further progress.

In June, a mail survey was conducted to determine which landowners would sign options and how each wanted to be paid (lump sum cash or installment payments). Separate appraisals of the market and farm use values of farmland were conducted for the County by private appraisal firms throughout July and August, but were conducted only for the lands of those owners willing to accept lump sum cash payments. Appraisal of the lands of those owners desiring installment payments was tabled (as was a bond resolution introduced into the County Legislature in July by Mr. Klein to fund program acquisitions) pending an Internal Revenue Service ruling on the County's proposed installment payment plan. In the meantime, preparations were made to begin transactions with those landowners willing to accept lump sum cash payments.*2

*1Suffolk County Cooperative Extension (SCCE), Suffolk County's Purchase-of-Development-Rights Farmland Preservation Program: A Chronology of Major Events (Riverhead, N.Y.: SCCE, n.d.) [hereinafter cited as A Chronology of Major Events]. (Mimeographed.)

*2John V.N. Klein, "Preserving Farmland on Long Island," Environmental Comment (January 1978): 11-13.

3.2.2.4 Klein Re-elected

Mr. Klein gained re-election to office in the Fall of 1975, but his party (the Republican Party) lost control of the County Legislature at the same time. Thus, there was some concern as to whether or not the new County Legislature would be as receptive to the farmland preservation program in the coming year as the previous one had been during the preceding two years.

On March 4, 1976, the Select Committee met to discuss the acquisition of development rights to 4,450 acres at \$20,518,643 in the Eastern Suffolk towns of Riverhead, Southold and Southampton. These acquisitions would constitute Phase I of a three phase program, and would only involve original cash parcels contiguous up to 200 acres.*³

In late April resolutions were introduced into the County Legislature by Mr. Klein calling for, among other things, the sale of \$21,000,000 in bonds for the purchase of development rights to 3,883 acres of farmland in the County. Two weeks later the County Legislature came to a vote on the submitted resolutions and voted to table them,** effectively placing the PDR program in suspended animation. With a

*³Status Sheet of the Suffolk County Farmland Preservation Program.

**The vote to table the bond resolution was ten in favor of tabling, eight opposed to tabling. The votes for the other resolutions were all unanimous in favor of tabling.

Democratic controlled Legislature in office, the future did not look bright for Mr. Kleins' program.

Soon thereafter, however, the winds of political influence in the County began to stir about the stalled farmland preservation effort, and once again the program started to move. The impetus for renewed activity came from a coalition of environmental and civic organizations formed to generate public support for the preservation effort and, more particularly, Mr. Kleins' PDR program. Their efforts throughout the months of July and August helped to re-establish momentum for farmland preservation in the County, and on September 8, 1976, the County Legislature met in special session and approved a \$21,000,000 bond resolution and nine other resolutions authorizing the purchase of development rights to 3,800 acres.*5

The Legislature's approval of the resolutions set the stage for completion of Phase I of the preservation program. As was envisaged shortly thereafter, the program was to consist of three phases, the first two phases entailing the purchase of development rights to large blocks of farmland deemed suitable for preservation, and the final phase entailing the purchase of development rights to parcels connecting these larger blocks. As so developed, it was

*5A Chronology of Major Events.

projected that the County would eventually acquire the development rights to between 12,000 and 15,000 acres of farmland at a total program cost of \$55,000,000.⁴⁶

The first step taken toward the completion of Phase I was to contact the owners of parcels selected and approved for that phase, and determine their willingness to proceed with the program. An informational meeting was then held with the willing landowners to discuss procedures for contracts and subsequent legal proceedings concerning the sale of their development rights to the County. The County then retained a number of appraisal firms to reappraise Phase I parcels, as there were clear indications that the value of developable land in the County had declined over the previous year and one-half.⁴⁷ Reappraisals were conducted from February through September of 1977, and submitted to and verified by the County Department of Land Management.

3.2.2.5 Initial Development Right Purchases Made

Negotiations with farmland owners for the purchase of the development rights to their lands began in August, when nearly all of the necessary reappraisals had been completed. On September 29, 1977, more than three years after the

⁴⁶Press release. Office of County Executive John V.N. Klein, Hauppauge, N.Y., 29 September 1977.

⁴⁷Klein (1978), p. 12.

passage of the local law authorizing implementation of the PDR program, the first contracts were signed for purchase of development rights to farmland in the County.⁴⁸ Twelve tentative acceptances of the County's offers had already come in by this time, thus there was much optimism that the County's program had finally taken seed and would have a bright future before it.

The County's program suffered somewhat of a minor setback in November, when the Internal Revenue Service issued a ruling rejecting the County's proposed installment payment plan for purchasing development rights. Overall, however, the Fall of 1977 was a good time for the program and for Mr. Klein, as contract discussions continued between farmers and the County, the bonds for program financing sold quickly and with favorable terms, and Mr. Klein once again had a Republican majority in the County Legislature. By mid-1978, 3,342 acres of a targeted Phase I total of 3,800 acres were committed to the program in varying degrees of contract signing, at a cost of \$12,000,000.⁴⁹

⁴⁸Two contracts were signed, the development rights to 215 acres being sold to the County for a total of \$618,875.

⁴⁹Press release. Office of County Executive John V.N. Klein, Hauppauge, N.Y., 16 July 1978.

In August of 1978, with Phase I well underway and near completion, letters were sent to all owners of farmland in the County soliciting a second round of bids for the sale of development rights to the County. By September 19, the date of Phase II bid opening, 255 bids had been received from the owners of farmland throughout the County covering 13,078 acres of farmland at a total cost of \$72,900,000, or \$5575 per acre.⁵⁰ These bids were then filed and mapped, and the information passed on to the Select Committee.

The Select Committee spent February through July of 1979 evaluating the Phase II bids and identifying the parcels which they felt the County should proceed with the appraisal of. On August 13, 1979, the Select Committee recommended 6,710 acres at a total price of \$37,916,245 for appraisal. Action from this point on, however, was not to be fast in coming.

3.2.2.6 Klein Defeated

In September of 1979, Mr. Klein was defeated in the Republican primary for County Executive, the farmland preservation program not even having been an issue. What was the issue was the Southwest Sewer District Project, a

⁵⁰Suffolk County Cooperative Extension (SCCE), Status of Farmland Preservation Efforts in Suffolk County (Riverhead, N.Y.: SCCE, April, 1980). (Mimeographed.)

massive sewer construction project in the southwest portion of the County. Tremendous cost overruns in combination with charges of political corruption and nepotism led to Mr. Kleins' defeat to Peter Cohalan, an opponent whose views on the County's preservation program were not entirely clear. Mr. Cohalan was subsequently elected County Executive, and took office on January 1, 1980.

On February 26, 1980, Mr. Cohalan presented his open space policy to the County Legislature.⁵¹ In it he recommended that the farmland preservation program be cut in total cost from \$55,000,000 to \$31,000,000, that steps be taken to preserve at least one major area of farmland in Western Suffolk, and that Phase I of the program be completed as quickly as possible. In essence, Mr. Cohalan viewed the previously submitted Phase II bids as part of Phase I of the program because funds left over from the original round of development right purchases were to be used for purchasing development rights in the second round. The second phase of the PDR program was now to be the final phase of the program, and Mr. Cohalan recommended that \$10,000,000 be set aside for these additional purchases.

⁵¹Peter F. Cohalan, Open Space Policy (Hauppauge, N.Y.: Office of the County Executive, [1980]).

Mr. Cohalan also recommended that the towns use cluster zoning and other zoning techniques to preserve open space in their towns, and that cooperative efforts be pursued between the towns in planning for the preservation of agricultural lands. He further recommended more of an effort at generating farmer interest, support and participation in the formation of agricultural districts. In 1971, New York State became the first state to pass agricultural districting legislation,⁵² but interest in agricultural districts in Suffolk County has been slow in developing.⁵³

On July 8, 1980, the County Legislature made its most recent move with regard to the PDR program. The Legislature approved Resolution No. 656 authorizing the appraisal of sixty-one parcels of farmland throughout the County, representing 3,157 acres of farmland. Appraisals of these parcels are now being conducted.

3.2.3 Retrospect

To date, Suffolk County has been able to acquire the development rights to 3,214 acres of farmland in the County at a cost of approximately \$9,600,000. These acquisitions

⁵²N.Y. AGRIC. & MKTS. LAW, Sections 301-307, 1971 (McKinney 1972, Supp. 1977).

⁵³One 3,000 acre district currently exists, and another smaller district is under consideration.

ensure the presence of agricultural open spaces in the County perpetually, or until such time when the voters of the County decide through referendum to dispose of part or all of the rights held by the County. These acquisitions do not ensure the continuation of farming as an economic activity within the County; they merely decrease the probability that farming will be driven from the acquired lands by certain economic forces (e.g., property taxes, inheritance taxes, etc.).

Suffolk County's PDR program sets a precedent in the United States for the use by local government of less-than-fee acquisition for the preservation of agricultural land. The fact that this particularly expensive tool for agricultural land preservation ever came to be used in Suffolk County⁵⁴ is a tribute to the political clout and persuasive ability of former County Executive Klein. His consistent and persistent support of the PDR program helped to maintain the momentum necessary to carry the program through almost six years of uncertainty and controversy.

Besides the acquisition of the development rights to 3,214 acres of farmland in the County (with more to come), the County's program has served as catalyst for the preservation of much of the remaining farmland.⁵⁵ There has

⁵⁴Property and other local taxes in Suffolk County are among the highest in the nation.

been increased interest in agriculture in the County, which is evidenced by town level preservation initiatives and farmer interest in agricultural districting. In addition, there has been a shift in overall farmland ownership to the active farmer, as financially overextended speculators have been selling out their development rights to the County and the agricultural title to farmers.⁵⁶ Apart from these accomplishments, the County's program has enhanced the public's knowledge and perception of the agricultural sector in the County, thus paving the way for better relations between the agricultural community and their suburban counterparts. Suffolk County's farmland preservation program most certainly has done much to promote agriculture in the County, but at what cost and at whose expense?

Criticisms have been leveled at Suffolk County's farmland preservation program from many different angles. The construct of the program has borne the brunt of much of the criticism, as the program costs have largely fallen upon a group of people--the residents of Western Suffolk--who were not permitted the opportunity to participate in the formulation of a recommendation concerning the approach the County should take to preserving its farmlands,⁵⁷ and who

⁵⁵Newton (December 1979), p. 4.

⁵⁶Newton (December 1979), p. 4.

are unlikely to enjoy the more tangible benefits of program operation. Yet, the PDR program had substantial support from the residents of Western Suffolk, which may have been attributable to the unique island geography limiting accessibility to alternative open space, concerns about overpopulation, and/or the relative affluence of the County's residents.⁵⁸

One of the stated goals of the farmland preservation program was the preservation of a viable agricultural economy. Yet, by excluding from consideration certain agricultural land uses (e.g., poultry farms, nurseries, sod farms), a large sector of the agricultural economy (in terms of cash income) was left unprotected. Although it is somewhat unlikely that poultry (duck) farms could serve as prime sites for development, there is no reason to believe that nurseries, sod farms and the like could not serve as such. Given this and given the fact that these other agricultural uses generate gross receipts per acre far in excess of those for land used for potatoe or vegetable farming,⁵⁹ it is difficult to reconcile the exclusion of

⁵⁷This task was assigned to the Agricultural Advisory Committee (AAC), which was composed entirely of farmers.

⁵⁸William G. Leshner and Doyle A. Eiler, "An Assessment of Suffolk County's Farmland Preservation Program," American Journal of Agricultural Economics 60 (February 1978): 10-13.

these lands from program consideration with the goal of preserving a viable agricultural economy.

The time it took to get the County's PDR program going and to acquire the first development rights was certainly a strike against the program. In fact, County Executive Cohalan cited this as being a reason to move away from the PDR approach to agricultural land preservation and to look at other approaches.⁶⁰ Given the pioneer nature of Suffolk County's approach, the time delay is somewhat understandable. Nevertheless, it does serve to illustrate the nature of the political gamble taken in this sort of approach to preserving agricultural land.

As was required by the enabling legislation, disposition of development rights acquired by the County could only occur with the consent of voters in a Countywide referendum. Such an arrangement raises serious questions as to the ability of towns with a large amount of preserved acreage within their boundaries to be able to have control over land use within their boundaries. Should conditions change within one of these towns to warrant the disposition of development rights in order to provide for future growth, then what choice does the town have in the matter? A

⁵⁹Lesher and Eiler, p. 141.

⁶⁰See Cohalan, note 51.

referendum system for the disposition of development rights is both cumbersome and inequitable, and leaves little room for local self-determination in land use matters.

PDR is a costly method of achieving desired land use objectives, although cost may be viewed as a trade-off for effectiveness. But the fact that other, more conventional methods of land use control have thus far had only limited success in preserving agricultural lands does not mean that these methods should be abandoned. This appears to have been the case in Suffolk County back in the early 1970's, when the County's preservation program was first being constructed. For a program as costly and complicated as PDR, much more consideration should have been given to the potential use of zoning and/or other more conventional forms of land use controls to preserve agricultural land. This should have been the case in Suffolk County, where the brunt of the PDR program costs were borne by the residents of Western Suffolk.

Certain conclusions regarding the use of PDR may be drawn from the Suffolk County experience. Foremost among these conclusions is that PDR is likely to be a viable farmland preservation option only in those areas where there exists strong support for growth management and, more specifically, for farmland preservation. It is doubtful that PDR would be

a viable option in areas lacking such support, as there would be little basis for justifying the tremendous costs associated with PDR and little hope of obtaining the necessary funding.

Following from this, PDR is likely to be an option only in those areas which can afford the great expense associated with PDR. The exceptions to this are those instances where funding for PDR program purchases comes from Federal or state sources. In the absence of Federal or state funding, the use of PDR is likely to be restricted to those areas with a population both willing and financially able to make the PDR commitment.

Finally, PDR is a likely option in those areas where, for one reason or another, other farmland preservation options are inappropriate or inapplicable. While this was not exactly the case in Suffolk County, fragmentation of land use control responsibilities and difficulties in coordinating land use planning activities among the towns most probably were contributing factors to the choice of PDR. By using PDR, Suffolk County by-passed these problem areas, if only temporarily. With the County's de-emphasis of PDR, however, these coordination difficulties are problems which must now be dealt with.

Chapter IV

TRANSFER OF DEVELOPMENT RIGHTS (TDR)

4.1 TDR AS A TOOL FOR AGRICULTURAL LAND PRESERVATION

Transfer of development rights (TDR) has been a topic of discussion among planners and others concerned with the profession of planning for quite some time.¹ Application of the concept, however, did not occur until the early 1970's, when TDR came to be used for such diverse purposes as historic preservation, open space preservation, and the preservation of fragile ecological resources. Enough program experience has now developed around density transfer that first generation questions (will it work?) have given way to second generation questions (how effectively does it work? in what jurisdiction is it most suited?).²

This chapter is concerned with the use of TDR as a tool for agricultural land preservation. Recent interest in agricultural land preservation has found many local governments throughout the nation looking for an

¹One of the earliest (if not the earliest) discussion of the TDR concept can be found in Gerald D. Lloyd, "Transferable Density in Connection with Density Zoning," New Approaches to Residential Development (Washington, D.C.: Urban Land Institute, 1961).

²Based on personal correspondence between Dr. Peter Pizor, Director, Public and Environmental Affairs, Indiana University East, and the author.

agricultural land preservation tool suited to specific local needs. In many cases, TDR has been the tool which has been chosen.

4.1.1 Definition and Development of the Concept

The concept of TDR, akin to the concept of PDR, is based on the recognition that ownership of land consists of a "bundle of rights," of which only one is the right to develop it.³ Unlike PDR, however, the development potential can be separated from the raw land value and transferred to another parcel of land.⁴ When this is done, the parcel from which the development potential is transferred (in the form of development right certificates, credits, etc.) is forever restricted in use to its current use, or is restricted in use until such time when a rezoning permits development thereupon.⁵ An example of the use of the TDR concept should help to better illustrate what TDR is, how it operates, and what it accomplishes.

³Coughlin and Plaut, note 2 (Chapter III).

⁴Peter J. Pizor, "A Review of Transfer of Development Rights," The Appraisal Journal 46 (July 1978): 387.

⁵Should future demand for developable land at some point exhaust available supply of such land, then rezoning to meet the demand may be necessary.

Murp County is divided into two areas: growth areas, located immediately adjacent to major transportation corridors, and preservation areas, located outside of the growth areas. Development is currently permitted at one unit per acre in the growth areas, and at one unit per five acres in the preservation areas. While it was initially assumed that five-acre zoning in preservation areas would be sufficient to discourage development, experience to date shows that the zoning has contributed little towards this end. As a consequence, agricultural and other open space lands are being subdivided and sold off at an alarming rate.

The County is aware of the problem which exists in the preservation area, but is not quite sure what should be done. Ideally, the County would like to purchase either the absolute fee title or the development potential to the lands within the preservation areas, but these options are out of the question because of the cost involved. Further and more restrictive regulatory intervention (e.g., larger lot sizes) is a possibility, but such a move would not recognize the equity interests of the landowner in his/her land. Clearly what the County is looking for is an intermediate solution, one which will preserve the land while at the same time protecting landowner equity interests. Upon the advice of a private consultant, the County decides to adopt a TDR

approach to preserving the land within the preservation areas.

The County develops a TDR preservation scheme as part of revised comprehensive plans for both the growth and preservation areas, the scheme to be implemented through appropriate rezonings. Preservation areas are rezoned to permit densities of one unit per twenty-five acres, and the landowners within the preservation areas are allocated development rights on the basis of one right per five acres, corresponding to the previously permitted density of development in the preservation areas. Bonus density provisions are adopted for growth areas to permit densities of up to four units per acre, each additional unit of density available in exchange for a development right purchased from a landowner in the preserve area. The developer in the growth area eagerly purchases development rights from the landowner in the preservation area, as more profit can be realized by developing at the higher density than at the density permitted as a matter of right (one unit per acre).

TDR thus transfers development potential from those areas of Murp County least suited for development (the preservation areas) to those areas most suited for development (the growth areas). In the process, the

landowners in the preservation areas are compensated for what might otherwise be considered an unreasonably heavy regulatory burden, and the landowners in the growth areas are afforded the opportunity to develop at densities greater than those permitted as a matter of right.

A minimal public cost commitment is associated with the use of TDR because, at least in the ideal, TDR operates through the private market. Development rights are transferred between private individuals in the market, the value of rights determined by market forces. Theoretically, the only government involvement with respect to TDR occurs during program development and implementation. TDR is developed through the comprehensive planning process, and is implemented in much the same way that the comprehensive plan is implemented: through appropriate rezonings, designed to achieve designated planning goals and objectives. Once implemented, TDR is meant to operate independently of the need for governmental regulatory intervention.

Use of TDR for agricultural land preservation purposes does not represent the initial use of the concept. Initially, TDR was used as a tool for historic preservation in New York City during the early 1970's. While its use for this purpose continues today, more and more uses for TDR as a tool for land use control are being discovered.

TDR is an evolutionary, not revolutionary, concept in land use control. Precedents are available both outside of and within real property law.

From outside of real property law, contemporary precedent is found in gas and oil regulations that provide for pooling⁶ and unitization,⁷ the doctrinal analogy to TDR being that the development of a common pool of gas and oil resources results in a loss of development potential for some owners in order that the community of owners might minimize waste.⁸ Similarly, TDR redistributes development potential to prevent wasting the publicly valued resources of landmarks, open spaces and farmlands.⁹

Within the realm of real property law, clustering, planned unit development (PUD), special districting, and sale of air rights are close analogues of TDR.¹⁰ The first three techniques are essentially density transfer techniques, whereby potential density is transferred within a

⁶Pooling controls the siting of wells and rate of extraction to optimize recovery.

⁷Unitization involves the operation of an entire oil or gas reservoir without regard to patterns of surface ownership, the idea being to prevent waste of the resource through non-conflicting extraction of the resource.

⁸Dwight H. Merriam, "Making TDR Work," University of North Carolina Law Review 56 (January 1978): 86.

⁹Merriam, p. 86.

¹⁰Merriam, p. 86.

parcel, as opposed to transfer between parcels under TDR. The sale of air rights, like TDR, recognizes that a parcel's value consists of its present use value and its development potential.¹¹ As with the first three techniques, density is transferred with the sale of air rights, but is transferred only in ownership, not in physical location.¹²

TDR has evolved as a sort of hybrid, lying between the extremes of regulation of private property under the police power without compensation, and full public acquisition through exercise of eminent domain.¹³ The former is undesirable because of constitutional questions regarding the "taking" of private property without just compensation, while the latter is undesirable because of the tremendous costs of full fee acquisition and property maintenance. In an age when the preservation of open space is an important public priority, TDR offers a means by which such priority may be met at minimal public cost.

¹¹Merriam, p. 87.

¹²Air rights remain attached to the property from which they are sold, unless provisions exist for their transfer elsewhere. The buyer of the rights is entitled to develop within the airspace purchased over the seller's lot.

¹³Norman Williams, Jr., "Transfer of Development Rights - Preliminary Memo." Memo No. 4, by Norman Williams, Jr., n.p., n.d..

4.1.2 Implementation Considerations

Unlike PDR, there has been a fair amount of TDR program implementation experience in the United States over the past decade.¹⁴ This experience has helped to expose problems of TDR program implementation and operation, and has permitted the refinement of the concept. Refinement of the concept has led to the construction of a classical model for TDR, consisting of the following components:¹⁵

1. A transfer district that can absorb relatively high levels of density.
 2. An area for preservation that can be either farmland, open space, or developed uses such as landmarks.
 3. A means of defining the amount of development a development right, credit, point or other measure, is worth.
 4. A means of permitting the sale and purchase of development rights.
 5. The operation of a development rights bank that can buy or sell land either with or without development rights, as well as purchase and re-sell the rights.¹⁶
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¹⁴See Peter J. Pizor, "Transfer of Development Rights Programs in the United States" (Peter J. Pizor, Indiana University East, 1980). (Mimeographed.) Approximately twenty local level TDR programs are in operation in the United States today.

¹⁵Peter J. Pizor, "Density Transfer: A Decade of Experimentation" (paper based on research supported by the Urban Forest Research Program of the U.S. Forest Service, by the New Jersey Agricultural Experiment Station, and by the Faculty Research Council, Georgia Southern College, Statesboro, GA, 1980), pp. 11-12.

This model is admittedly a gross simplification of the TDR concept, but it does layout what are generally considered to be the most basic elements of a TDR program: a receiving area (where rights are transferred to), a sending area (from which rights are transferred), and mechanisms for valuation and transfer of development rights. It is necessary, however, to go beyond these very basic considerations when attempting to establish or implement a TDR program.

There are five basic steps involved in creating a viable TDR farmland preservation program.¹⁷ These steps may be summarized as follows:

1. Identification of the area(s) to be preserved. The preservation area(s) should be zoned residential,¹⁸ have farming as the primary land use, and be in a substantially unimproved state (i.e., little or no public infrastructure present). Legal designation of the preserve area(s) could be accomplished through local legislation or through the local comprehensive plan. The latter would be suggested, so that the
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¹⁶A development rights bank is not a necessary component--it is necessary only when TDR receiving areas are not yet established.

¹⁷B. Budd Chavooshian, Thomas Norman, and George H. Nieswand, Transfer of Development Rights: A New Concept in Land Use Management (New Brunswick, N.J.: Rutgers University, Cooperative Extension Service, Leaflet 492-B, 1974), p. 9.

¹⁸Residential zoning should exist so that a basis is present for transferring units of residential density elsewhere.

choice of area(s) is integrated with the overall growth and development goals of the community.

2. Calculation of residential development capacity or potential under current zoning for the preservation area(s), and allocation of development rights to qualifying parcels. At least three approaches have been proposed for issuing development rights: on a per acreage basis, on a unit for an equivalent unit basis, and on the basis of the dollar loss of development potential suffered by the landowner due to TDR program implementation.¹⁹ Once a method is chosen, then allocation of development rights can take place.
3. Distribution of development rights to qualifying parcels within the preservation area(s).²⁰ There is a when and how to development rights distribution--when, or at what point, should development rights be distributed, and how should they be distributed? Before distribution, thought should be given to an accounting system to keep track of development right transfers and deed restrictions, which would be entered for parcels from which all development rights have been transferred.
4. Creation of a private sector market which will give "value" to development rights. Designation in the local comprehensive plan of areas to receive transferred development credits is the step which creates the market for development rights, hence adding legal credibility to the TDR program. Densities at the receiving end should be tied to the development capacity of the land. To assure a market for development rights within the receiving area(s), permitted density should be sufficiently below the number of development rights allocated

¹⁹David Heeter, "TDR and the Comprehensive Planning Process," in Frank S. Bangs, Jr. and Conrad Bagne, eds., Transferable Development Rights (Chicago: American Society of Planning Officials, Planning Advisory Service Report No. 304, March [1975]), p. 44.

²⁰It may be desirable to distribute development rights to parcels outside of designated preservation areas, if the character of such parcels dictates that they be preserved.

so that there would be a demand for development rights.²¹ Conversely, permitted densities within sending areas must be sufficiently above the number of development rights allocated so that there would be a surplus of development rights for sale.²² In case of market failure, a government-run development rights bank could act as purchaser of last resort to assure continued program viability.

5. Maintenance of the development rights market. Outside of a government-run development rights bank, rezonings could be used to create more demand for development rights in the case of a slow market, or could be used to feed demand in the case of a fast market. Justification for any rezonings could be established through comprehensive plan revisions and immediate zoning map amendments.

Apart from these steps towards the creation of a viable TDR program, other factors must be taken into consideration. These factors include:

- the intent or purpose of the TDR ordinance.²³
- justification in terms of public policy.
- taxation of development rights.²⁴
- definition of what rights are being transferred.

²¹Donald M. Carmichael, "Legal Precedents for Adoption of a TDR System: Colorado," in Bangs and Bagne, supra.

²²Carmichael, in Bangs and Bagne, supra.

²³For a discussion see Howard E. Conklin, ed., "Preserving Agriculture in an Urban Region: Northeast Regional Research Project 90 Report," New York's Food and Life Sciences Bulletin 86 (1980): 14.

²⁴Conklin, p. 16.

- the type of density to be transferred (residential, commercial, industrial).
- specification as to a mandatory or permissive transfer system.²⁵
- the areal extent of the TDR program.²⁶
- specification as to parties eligible to purchase development rights (restricted to property owners in the receiving area(s), or unrestricted--anyone can purchase).²⁷
- provisions for retirement of excess development rights in the marketplace.²⁸

TDR, despite increased understanding of the concept gained through program experience, remains a complex tool for land use control. Despite its complexities, more and more local governments are exploring the use of TDR for agricultural land preservation and other public purposes. Currently there are approximately twenty local level TDR

²⁵Pizor (1978), p. 396.

²⁶Pizor (1978), p. 395.

²⁷For discussion see Peter J. Pizor and B. Budd Chavooshian, "Preserving Open Space: An Early Evaluation of TDR Program Experience" (a paper in the Journal Series of the New Jersey Agricultural Experiment Station, New Brunswick, N.J., n.d.), p. 22.

²⁸It has been suggested that, in instances where excess rights exist in the marketplace, a mechanism might be used to retire them either temporarily or permanently, to protect both the market for development rights and the integrity of the planning process. See Frank Schnidman, "Transferable Development Rights (TDR)," in Hagman and Misczynski, eds., Windfalls for Wipeouts: Land Value Capture and Compensation (Chicago: American Society of Planning Officials, 1978), p. 551.

programs in operation in the United States,²⁹ in both urban and non-urban areas. TDR program activity is particularly heavy in the State of Maryland, where encroachment of urban activities upon farmland has stirred intense statewide interest in agricultural land preservation. Montgomery County recently became the second county in that state to use the TDR approach for farmland preservation. An investigation into what Montgomery County has done to date with TDR should provide perspective with regard to the application of TDR as a tool for agricultural land preservation.³⁰

4.2 CASE STUDY: MONTGOMERY COUNTY, MARYLAND

Montgomery County, MD, is a suburban-rural county located immediately adjacent to Washington, D.C.. It is bordered to the northwest by Frederick County, MD, to the southwest by the Potomac River, to the northeast by Howard County, MD, and to the southeast by the District of Columbia and Prince George's County, MD. The total land area of the County is

²⁹See Pizor, note 14.

³⁰The choice of Montgomery County was based upon (1) the availability of information, and (2) the similarities between Montgomery County and Suffolk County (e.g., both are proximate to large urban areas, both have large supplies of agricultural lands which have been affected by development pressures, both continue to experience difficulties today from urban encroachment).

323,000 acres,³¹ of which approximately 132,000 acres (forty percent) was in agricultural use during 1979.³²

Population in Montgomery County has increased substantially over the past forty years, from 83,912 in 1940³³ to 574,106 today.³⁴ The majority of this growth has been concentrated within a fifteen-mile radius of the District of Columbia - Montgomery County border, in the communities of Chevy Chase, Bethesda, Kensington, Silver Spring, Wheaton, Rockville and Gaithersburg. Growth in the form of subdivision activity has also been occurring in the further reaches of the County, near the rural communities of Damascus, Clarksburg and Poolesville. A relatively well-developed transportation network, an affluent metropolitan area population and an aesthetically pleasing environment make for a strong market for such growth now and in the immediate future.

³¹The Maryland-National Capital Park and Planning Commission, Functional Master Plan for the Preservation of Agriculture And Rural Open Space in Montgomery County: Preliminary Draft (Silver Spring, MD: M-MCPPC, March, 1980), Melissa Banach, Project Planner, p. iii [hereinafter cited as Functional Master Plan].

³²Functional Master Plan, p. 13.

³³U.S. Bureau of the Census. 1960 Census of Population: Characteristics of the Population, Vol. 1, Part 22, Table 7, p. 10.

³⁴The Washington Post, 15 November 1980, Sec. A, p. 16.

4.2.1 Farmland Conversion in Montgomery County

The period since 1950 has been marked by annual losses of productive agricultural acreage in Montgomery County, the losses being small in some years and large in others.³⁵ Between 1950 and 1979, total agricultural acreage in the County decreased by over 81,000 acres, or by approximately forty percent.³⁶ Chances for a break in farmland conversion in the County appear slim, as throughout the past decade there were steady increases in the number of dwelling units constructed on septic systems, in the number of preliminary subdivision plans approved, and in the number of lots approved as part of preliminary subdivision plans.³⁷ If recent growth trends continue, approximately 6,700 acres of farmland will be lost to development in the next five years.³⁸

The case for farmland preservation in Montgomery County is a strong one. Economically, the County's dairy, beef, corn and soybean farms generated more than \$22,000,000 in income in 1978.³⁹ In the same year approximately \$16,800,000

³⁵Among other things, these annual losses may be attributable to crop price levels, land market activity, and demand for various agricultural commodities.

³⁶Functional Master Plan, p. 13.

³⁷Functional Master Plan, pp. 12-15.

³⁸Functional Master Plan, p. 12.

was contributed to the County's economy through farm production expenses.⁴⁰ From an environmental standpoint, preservation of County farmlands makes sense because of regional air and water quality considerations, limited septic suitability of much of the County's land area, and the existence of designated Areas of State Critical Concern.⁴¹ Separate from these justifications, there is nationwide interest in preserving our rural small town heritage. This interest could well be served in the County, as many small rural hamlets continue to exist today as they have so existed for many years previous. However, to serve this interest and the interests of agricultural economy and environment requires that steps be taken to combat the forces which threaten these interests.

4.2.2 Montgomery County's Response

Open space preservation has long been a planning objective in Montgomery County, but historically has been an objective for reasons other than agricultural land

³⁹Royce Hanson, "Montgomery County, Maryland: An Affluent Washington Suburb Proposes Going the TDR Route," Farmland Preservation Survey 1 (April 1980): 5.

⁴⁰Functional Master Plan, p. 23.

⁴¹Areas of State Critical Concern are unique and irreplaceable in character. They become so designated upon recommendation to the State by individual counties.

retention.*² The County's commitment to open space preservation is evidenced by The Montgomery County General Plan,*³ adopted in 1964 and updated in December of 1969. In this plan, the policy of wedge and corridor development for the County was set forth. This policy expressed the idea of radial corridor development outward from the District of Columbia, the development corridors being separated by wedges of rural, open space, low density residential, rural villages, and preservation uses.*⁴ With respect to development within the wedges, the General Plan's rural pattern recommendations have four broad purposes:*⁵

- To help make the urban pattern efficient and pleasant.
- To provide and protect large open spaces for recreational opportunities.
- To provide a rural environment in which farming, mineral extraction, and other natural resource activities can be carried out.
- To conserve natural resources and protect the public water supply and recreational waters.

*²These reasons include recreation, aesthetics, and ground water recharge.

*³The Maryland-National Capital Park and Planning Commission, The Montgomery County General Plan On Wedges and Corridors (Silver Spring, MD: M-NCPPC, 1964).

*⁴Functional Master Plan, p. 4.

*⁵Functional Master Plan, p. 4.

Examination of these purposes would seemingly lead one to conclude that agricultural land preservation was indeed a purpose for planning activity in the County, albeit an indirect purpose. The idea of agricultural land preservation being an indirect purpose appears to be supported by the fact that the updated General Plan (1969) treated each wedge as one large area without distinguishing between agriculture and rural open space areas.⁴⁶ In effect, the General Plan left to a later date the development of a detailed implementation strategy for farmland preservation.⁴⁷ Thus, agricultural land preservation appears to have been a consideration in the drafting of the General Plan,⁴⁸ but does not appear to have been an immediate priority.

4.2.2.1 Public Awakening

The early 1970's were a time of public awakening to the problems of the agricultural community, both in Montgomery County and throughout the United States. The awakening in Montgomery County was promoted by farmer complaints to the County Executive that their interests were being ignored,⁴⁹

⁴⁶Functional Master Plan, p. 4.

⁴⁷Functional Master Plan, p. 4.

⁴⁸The 1969 General Plan revision did provide for the rezoning of the wedge areas to two-acre minimum lot size, which may be interpreted in part as a manifestation of agricultural land preservation considerations.

and by a County Council directive to the Montgomery County Planning Board to study the feasibility of protecting the agricultural industry. This led to a couple of responses on the County's behalf, one response being the establishment of a County Agricultural Preservation Advisory Committee, and the other the creation of a position of Agricultural Resources Coordinator in the County government.⁵⁰ These responses helped to open channels of communication between the farm community and County government, thus facilitating both discussion and understanding of the farm community's problems and concerns. In addition, the establishment of the County Agricultural Advisory Committee provided a forum for the discussion of farmland preservation alternatives (including TDR), although specific recommendations did not come out of this forum.⁵¹

Following on the heels of the County's responses came the realization by the County that five-acre minimum lot size zoning was not going to accomplish the purpose of agricultural land preservation in the wedge areas.⁵² This

⁴⁹"Montgomery County's Preservation Program: How the Farmers and Developers View It," Farmland Preservation Survey 1 (April 1980): 10.

⁵⁰"Montgomery County's Preservation Program: ..."

⁵¹Based on 11/12/80 telephone conversation between Lynn Coleman, Planner, M-NCPPC, and the author.

realization may have come about as a result of particularly heavy farmland acreage losses in the early 1970's.⁵³ The farmland acreage losses for each of the years 1974 through 1978 were below the acreage losses for the years 1971 through 1973 (when two-acre minimum zoning was in effect), but these changes can not be tied in any certain way to potential effects of the five-acre minimum rezoning.⁵⁴

Revision of rural area master plans that would include agricultural preservation elements began in 1976, when work was started on a master plan for the Olney Planning Area. The Olney Master Plan⁵⁵ became a prototype plan for agricultural land preservation, using a TDR scheme within the Olney Planning Area. This scheme was expanded and subsequently used in the Functional Master Plan for the Preservation of Agriculture and Rural Open Space,⁵⁶ which included ten other planning areas in addition to the Olney Planning Area.

⁵²The wedge areas were rezoned in 1974 from two-acre to five-acre minimum Rural Zone classification.

⁵³See Functional Master Plan, p. 13. Based on tax assessors classification, nearly 15,000 acres of farmland were lost between 1970 and 1973.

⁵⁴Recession in the economy and crop price levels during the 1974-1978 period are more likely explanatory factors.

⁵⁵Adopted June 1980.

⁵⁶See note 31.

Although state enabling legislation authority did not exist for the use of TDR at the local level, a ruling by the Maryland Attorney General on a citizen challenge to the proposed use of TDR in Montgomery County gave consent to the use of the tool.⁵⁷ This ruling may very well have come from the Attorney General's interpretation of the broad grant of legislative authority given the Maryland-National Capital Park and Planning Commission by the General Assembly of Maryland, when the bi-county agency was created in 1927.⁵⁸

4.2.2.2 Statewide Efforts Surface

Statewide agricultural land preservation efforts surfaced in Maryland in 1977, when the General Assembly enacted a law⁵⁹ permitting both the establishment of agricultural districts at the local level and State purchase of development rights to land within these districts. The law also established the Maryland Agricultural Land Preservation Foundation, to purchase development rights to farmland within agricultural districts. Each county was required to -----

⁵⁷Based on 11/12/80 telephone conversation between Lynn Coleman, Planner, M-NCPPC, and the author.

⁵⁸From the presentation of Royce Hanson, Chairman, Montgomery County Planning Board, at Virginia Legislative Workshop on TDR, 10/13/80, Leesburg, Virginia.

⁵⁹MD. Sec. 2-501 to 2-515. Maryland Department of Agriculture regulations 15.17.01 to 15.17.06 implement this statute.

appoint a five-member Agricultural Preservation Advisory Board, to advise county governing bodies on formation of agricultural districts and approval of development right purchases. The tasks of approval of agricultural districts and recommendation to the Agricultural Land Preservation Foundation concerning purchase of development rights to land within agricultural districts was left to each county governing body.⁶⁰

Enactment of the State farmland preservation legislation heightened awareness of the agricultural land conversion problem in the State. In Montgomery County this heightened awareness prompted thought and discussion of possible farmland preservation alternatives for the County. Zoning to a twenty-five acre development density zone was considered but was rejected, as it did not recognize the psychological and economic (equity) interests of the landowner in his/her land. Though agricultural districting and development rights purchase were available alternatives, agricultural districting by itself was viewed as being only a short-term solution, and districting with subsequent purchase of development rights was simply too expensive for the entire County, as the cost of farmland worth purchasing was around \$500,000,000.⁶¹ Clearly, an alternative was needed which

⁶⁰See Davies and Belden, note 29 (Chapter II).

would preserve farmland at minimal cost to the public while recognizing the legitimate interests of the farmland owner.

Discussion of farmland preservation alternatives, particularly of the TDR alternative, continued among the Montgomery County Planning Board, the Agricultural Preservation Advisory Board, and the Agricultural Advisory Committee throughout 1978 and into 1979. In the latter part of 1979 a sudden development turned discussion toward action.

4.2.2.3 Subdivision Proposal Prompts County Action

In October of 1979, a subdivision proposal was submitted to the County for a large parcel situated in the western portion of the County. Apart from the facts that the parcel was zoned Rural Zone five-acre minimum and was located in a designated Critical Farmland Area,⁶² the parcel was also located in one of the most scenic and relatively unspoiled areas in the metropolitan Washington area. The proposal prompted the County Council to place a one-year moratorium on subdivision approvals for Rural Zone five-acre parcels located within Critical Farmland Areas in the County. At the same time the County Council assigned the Montgomery County

⁶¹From the presentation of Royce Hanson, *supra*.

⁶²See note 41.

Planning Board the task of putting together a scheme to preserve these agricultural areas. The work was to be completed prior to the end of the moratorium period.

During the following year the County Planning Board and staff worked in concert with the Agricultural Preservation Advisory Board and the Agricultural Preservation Advisory Committee to develop a farmland preservation program suited to the needs of both the County and farmland owners within the designated Agricultural Preservation Study Area.⁶³ Following the prototype developed in the Olney Master Plan, the Countywide program proposed TDR as the centerpiece of the preservation effort for the County. Through a TDR approach to farmland preservation, the County believed it could accomplish the following objectives:⁶⁴

- preservation of the land.
- protection of landowner equity in land.
- provision of land for new farmers at farmland value.
- concentration of development in areas appropriate for development.

⁶³Designated in the Functional Master Plan, the Agricultural Preservation Study Area encompasses an overwhelming majority of the County's agricultural lands.

⁶⁴From the presentation of Royce Hanson, supra.

The Functional Master Plan for the Preservation of Agriculture and Rural Open Space in Montgomery County (hereinafter Functional Master Plan),⁶⁵ adopted by the County Council in September of 1980, was built upon the policy framework established by the plans which preceded it.⁶⁶ These plans include those of numerous planning areas, The Comprehensive Staging Plan,⁶⁷ and the General Plan. The Functional Master Plan also fits within the overall framework of the Countywide growth management program, which incorporates elements of the aforementioned plans and of other County plans and policies.⁶⁸

Specific structural elements of the County's TDR farmland preservation program are as follows:⁶⁹

1. A Rural Density Transfer Zone (RDTZ), from which development rights are transferred to non-contiguous receiving areas. Areas designated as Agricultural Reserve (Primary Agricultural Areas) in the Functional Master Plan would be included in this zone. Developable density in the zone is one dwelling unit per twenty-five acres, while
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⁶⁵See note 31.

⁶⁶Functional Master Plan, p. 7.

⁶⁷Details for this plan were laid out in Planning, Staging and Regulating, the fifth in a series of annual growth policy reports beginning in 1974.

⁶⁸The County Capital Improvements Program, The Ten Year Water and Sewerage System Plan, and the Adequate Public Facilities Ordinance.

⁶⁹Functional Master Plan, pp. 32-57.

development right allocation is set at one right per five acres of land, which corresponds to the allowable density of development under the previous zoning classification. The development rights may be sold and transferred to receiving areas, or may be converted into developable density on site at one dwelling unit per twenty-five acres, with the ability to cluster the units on one-acre minimum lots.

2. A Rural Cluster Zone (RCZ), where a carefully planned mix of residential and farming uses would exist. Areas designated as Rural Open Space (Secondary Agricultural Areas) in the Functional Master Plan would be included in this zone. Developable density in the zone is one dwelling unit per five acres (same as before), with an added cluster option for one-acre minimum lot sizes. Use of the cluster option would preserve the remainder of the tract in open space use. This land could then be used by the residents of the developed portion of the tract for recreational purposes, or could be leased to local farm operators.
 3. Receiving areas, as designated in area master plans. The Olney Master Plan, for example, provides for three receiving areas. Density bonuses differ for each receiving area: one dwelling unit per two acres to two dwelling units per acre (300 percent bonus), one dwelling unit per two acres to four dwelling units per acre (700 percent bonus), and one dwelling unit per acre to two dwelling units per acre (100 percent bonus).⁷⁰ The developer obtains the bonus by purchasing development rights and applying them to his/her parcel in the receiving area on the basis of one development right for each dwelling unit increase in density desired, up to the maximum permitted.⁷¹
 4. A County Development Rights Bank, to purchase development rights in the interim between designation of receiving areas and the necessary
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⁷⁰Olney Master Plan, Rural Area section.

⁷¹This receiving area strategy is utilized in the Functional Master Plan as well.

rezoning of receiving areas for the creation of a market for development rights.⁷² Given the general increase in property values in the County, the fiscal resources for the bank should roll over and become self-perpetuating once sales to the private sector begin.⁷³

The nature of Montgomery County's TDR farmland preservation program is optional and voluntary. The primary incentive for farmer participation is, of course, the money which may be made from the sale of development rights. For the developer, the incentive for participation is bonus density. Citizens who are neither farmer nor developer may also participate in the program by purchasing development rights, as no requirement exists that rights be attached to either the sending or receiving parcel. Thus, the program offers a little something for the farmer, the developer, and the citizen, should they so desire to take advantage of the opportunities available.

TDR is not yet operational Countywide. A rezoning request has been submitted to the County Council for 73,000 acres of uncommitted land⁷⁴ in the Agricultural Reserve.⁷⁵ This land

⁷²Another function of the Development Rights Bank would be to make loans using development rights as collateral.

⁷³Hanson, p. 8.

⁷⁴Uncommitted land is undeveloped, not in public ownership, and not located within the boundaries of a municipality.

⁷⁵The 73,000 acre figure excludes the Olney Planning Area. The TDR program for this area is designed to operate for the area only.

would be rezoned to RDTZ, creating approximately 14,000 development rights for sale and transfer to receiving areas. As far as receiving areas, rezoning is to be accomplished at the County level on a plan-by-plan basis, following adoption of planning area master plans. The County Council is committed to creating receiving areas in the very near future; in the meantime, the market for development rights will be dependent upon the County Development Rights Bank for support. Decision on the creation of the Bank has not yet come from the County Council, but the necessary legislation has already been introduced. Action on the creation of the Bank should logically precede the RDTZ rezoning.⁷⁶

4.2.3 Prospects

Prospects for Montgomery County's TDR approach to farmland preservation appear good, as there currently is a great deal of momentum behind farmland preservation efforts in the County, as well as in the region. This momentum is fed by continuing public and political support for farmland

⁷⁶Development rights should not be created prior to the existence of a market for them, as they would be valueless. There must be value associated with the development rights created under a TDR scheme, as the value of these rights is the compensation paid the landowner for the heavy regulatory burden imposed by the scheme. The Bank gives value to the development rights, thus keeping the TDR scheme alive and legal.

preservation, and by the progress made to date in construction and implementation of the TDR preservation program. With such support and momentum behind the preservation effort, there is sufficient reason to believe that farmland preservation, through the use of TDR, will soon be a reality for the County.

There are many plusses associated with Montgomery County's use of TDR as a tool for agricultural land preservation. Foremost among these plusses, the use of TDR should involve no more than a minimal commitment of public funds, as in the ideal development rights are transferred in a private market. The strong housing market which exists in the metropolitan Washington area should provide enough incentive for developers and others to purchase development rights, although public purchase may be necessary at the outset of the program until downzonings create markets for the rights.

While TDR preserves the land, it does not do so at the expense of the landowner. TDR recognizes the landowner's equity interests in his/her land by permitting the landowner the opportunity to capitalize on actual or potential increases in the developable value of the land.⁷⁷ In

⁷⁷PDR, as applied in Suffolk County, only provided for landowner capitalization on the actual developable value of the land.

recognizing these interests, TDR also recognizes any interests the farmer may have to be able to continue the farming operation.⁷⁸ The interests of the future farmer are also recognized, as the price of farmland is reduced by ridding the land of its development potential.

Montgomery County's application of the TDR concept is a particularly skillful one, as use of the concept has been carefully integrated with County policies and plans. These policies and plans provide a framework for TDR program implementation and operation, and thus add a measure of legal justification and credibility to the TDR program. As a community's conventional zoning ordinance depends upon the community comprehensive plan and other community plans and policies for justification, so must a community's TDR zoning ordinance depend upon the same for its justification.

Despite program experience in other localities, uncertainties surround the use of TDR in Montgomery County. A very basic uncertainty concerns the equity of development rights allocation based on a unit for an equivalent unit approach. Under this approach, two landowners each holding

⁷⁸Money gained through the sale of development rights may be used to purchase new equipment, buy livestock, pay bills, etc., thus helping to increase the viability of the farming operation. The viability of the farming operation should also be helped by property tax decreases, which should follow from the transfer of development potential from the land.

500 acres of farmland would receive 100 development rights apiece (one development right allocated per five acres), although it is quite possible that the development value of each parcel could differ substantially. In addition to this equity problem, interchangeability of development rights is difficult to comprehend under the unit for an equivalent unit approach.⁷⁹ Specifically, how does a single-family development right at the sending end translate into a multi-family development right at the receiving end?⁸⁰ Flexibility must be built into the TDR system to allow the owner of one kind of rights to sell them to a developer in need of a different kind of right.⁸¹

A market for development rights is the biggest uncertainty surrounding the use of TDR. A market for rights will be created only if the owners of developable land find it more profitable to develop at higher densities using rights than at the lower densities permitted as of right.⁸² TDR can not exist and function without a market for sale and transfer of rights. The market is the most basic element

⁷⁹Heeter, p. 44.

⁸⁰In the Olney Master Plan no distinctions were made regarding different types of development rights.

⁸¹Heeter, p. 44.

⁸²Jerome G. Rose, "Psychological, Legal, and Administrative Problems in the Use of TDR's to Preserve Open Space," in Bangs and Bagne, supra.

necessary to make the TDR scheme legal, by giving value to the allocated rights. If rights have no value, then the TDR program which granted the rights (and imposed the heavy regulatory burden upon the landowner) may be judged to constitute an unconstitutional taking of private property without just compensation, and thus be declared illegal.⁸³

The creation of a market depends, of course, on higher density given as an option to the receiving areas. Vocal and visible opposition to downzonings was present in the Olney Planning Area, and may be expected elsewhere in the Study Area. Density changes must be carefully planned with regard to the design character of receiving areas, to minimize potential design conflicts between existing and new development. Special subdivision and design standards may be needed to assure compatibility.⁸⁴

Taxation of development rights is yet another uncertainty surrounding the use of TDR. According to Royce Hanson, Chairman of the Montgomery County Planning Board,⁸⁵

⁸³Apparently the twenty-five acre minimum lot size zoning which accompanies Montgomery County's TDR scheme is defensible and legal, in and of itself, in the State of Maryland. Whether it would be defensible and legal elsewhere is a question whose answer differs among the states.

⁸⁴Compatibility can also be assured through the planning process and its accompanying studies.

⁸⁵From the presentation of Royce Hanson, supra.

development rights would be taxed as real property while attached to the sending parcel, taxed as personal property while not attached to either a sending or receiving parcel, and taxed as real property once re-attached to land. Questions are raised here as to how development rights would be valued for taxation purposes in all three instances, and in what locality taxes would have to be paid upon unattached development rights. It is possible that valuation for taxation purposes could be determined through property value assessments, but this seems inequitable given that the development rights allocation system treats all parcels the same--value of rights is determined in the market, independently of the value of an individual parcel for development purposes. In addition, valuation by this method would prove costly and would undoubtedly create an administrative morass. With regard to payment of taxes upon unattached development rights, would payment go to the County, the State, or elsewhere?⁸⁶

Establishment of a County Development Rights Bank seems a necessary step to get the TDR program going. But even if such a Bank is approved and funded, there is no guarantee that the TDR program will get off of the ground. Early

⁸⁶The question of where the personal property tax is to be applied is a complex one. Precedents or analogues may or may not be present in real and personal property law.

purchases of development rights with monies from the Bank should be for entire parcels only. If the TDR program were to fold thereafter, then the County would at least have preserved some farmland through development rights purchase. This would also solve the problem of the County being part-owner of the development potential in private land.⁸⁷

An absolute essential for Montgomery County's use of TDR is the maintenance of the policy and planning framework within which the TDR program resides. This could be a particularly troublesome aspect of TDR program maintenance, as policies and plans do change over time. To maintain its TDR program, Montgomery County must take care to change only that which requires changing (e.g., master plan updating). Ill-advised changes, such as the granting of unwarranted rezoning and variance requests, could lead to the collapse of the preservation program.

Experience with TDR to date, including Montgomery County's limited experience, seems to indicate that TDR is applicable (a) in areas where there exists strong support for growth management and, more specifically, for farmland preservation, and (b) in areas where there exists a strong development market. The former seems essential, as the

⁸⁷A possible way out of this dilemma would be for the County to sell the development rights it purchased from the farmer back to the farmer.

complexity of the concept and the regulatory burden imposed under the concept gravitate against more general applications of the concept. The latter is essential, as TDR cannot independently operate where no market exists for it to operate within. The applicability of the TDR concept thus appears to be limited at present; however, TDR will become more applicable a concept as the uncertainties of its use are clarified by further program experience.

Chapter V

PDR AND TDR IN COMPARISON

PDR and TDR have been receiving an ever increasing amount of attention throughout the United States as tools for the preservation of agricultural land. Both may be classified under the banner of compensatory zoning techniques, but such classification is not meant to imply that the techniques operate in the same manner. They represent unique concepts in land use management, each with its own peculiarities, advantages and disadvantages, which should be carefully evaluated by those interested in making use of either concept.

Focusing upon PDR and TDR as alternative means of achieving farmland preservation objectives, choice of either, neither, or both of these techniques should follow from the careful investigation of a broad range of considerations. For purposes of discussion, such considerations may be grouped into the categories of legal considerations, economic considerations, administrative considerations, and political considerations. Discussion under each category follows.

5.1 LEGAL CONSIDERATIONS

PDR and TDR bear similarity in law in that, at their most basic level of detail, both are based upon recognition of the severability of the development potential of land from fee title to land. Beyond this common legal basis, however, PDR and TDR are separate and distinct legal concepts, with basic differences between the two in how development potential is valued and disposed of.¹

Valuation of development potential under a PDR approach to farmland preservation is fairly straightforward. Separate appraisals of the market and farm use values of a parcel are conducted, the difference between the two appraised values representing the value of the parcel for development purposes. Upon payment of this value, the government obtains a permanent legal interest in the parcel (the development right), which gives the government the right to restrict, prohibit or limit the use of the parcel for any purpose other than agricultural production.²

Valuation of development potential under a TDR approach to farmland preservation is not as straightforward as valuation under a PDR approach. Although the valuation

¹The term "disposed of" makes reference to the disposition of development potential (i.e., development rights) once detached from the original parcel.

²Local Law No. 19-1974, Sec. 2, Suffolk County, N.Y.. Enacted 14 June 1974.

method associated with PDR may be applied in the use of TDR, applications of the TDR concept to date have employed other valuation methods.³ The most commonly employed methods are assignment of development rights to parcels on the basis of acreage (e.g., one development right per ten acres) or on the basis of unit for unit equivalency (e.g., one development right for each unit of single-family housing permitted under the previous zoning ordinance), the value of such rights being determined in the marketplace. Employment of these methods has raised serious questions as to the constitutionality of TDR as a tool for land use control.

The questions raised concerning TDR's constitutionality revolve about the taking issue--whether or not under the regulatory burden imposed by TDR the landowner is permitted the opportunity to realize a reasonable return on his/her property.⁴ If the restrictions imposed under a TDR system allow a reasonable return to the landowner, then TDR will not involve a taking.⁵ TDR will involve a taking, however, if the landowner is compensated for an imposed regulatory

³The author was unable to find reference to an active TDR program which employed the market use - agricultural use assessment approach to valuation.

⁴"Reasonable return" is determined on a case-by-case basis, with regard to the facts and circumstances peculiar to each case where the taking issue arises.

⁵Note. "The Unconstitutionality of Transferable Development Rights," The Yale Law Journal 84 (April 1975): 1101.

burden with development rights which have no value because a market does not exist for them. This was ruled to be the case in two separate challenges to the application of a TDR landmark preservation ordinance in New York City during the 1970's.⁶ In neither case was the TDR ordinance ruled unconstitutional on face; both held the TDR ordinance to be unconstitutional as applied because of the absence of a market for the rights.⁷

Establishment of a market for development rights is a troublesome proposition in and of itself. In the establishment of a market through the use of downzonings, care must be taken not to downzone past a point where the landowners in the receiving areas are denied the opportunity to realize a reasonable return on their property. Assuming a valid downzoning is accomplished, demand for development rights may or may not be present in the receiving areas, depending upon the market for higher-density housing in the receiving area and the ability of the developer to realize greater profit by taking advantage of the TDR bonus density. In addition, demand for development rights may go unsatisfied if the market for rights inaccurately reflects

⁶Fred F. French Investing Co., Inc. v. City of New York, 39 N.Y.2d 587, 350 N.E.2d 381, 385 N.Y.S.2d 5 (1976); and Penn Central Transportation Co. v. City of New York, Misc. 2d, 377 N.Y.S. 2d 20 (1972).

⁷Note. 84 The Yale Law Journal: 1110.

the value of the landowner's condemned development potential.⁸ The landowner would likely challenge the adequacy of the compensation in such case.

Disposition of development potential under PDR takes the form of a deed restriction prohibiting development upon the contracted parcel, except for that development which may be authorized in the purchase contract.⁹ The buyer of the development right holds the right in perpetuity, and is prohibited from applying it to any parcel save the one from which it came. Reapplication of the right to the original parcel is possible through either of two means: by sale of the right back to the owner of the parcel, or through the purchase of the remainder of the title to the parcel. However, reapplication of severed rights may be restricted in part by regulations and laws concerning sale of publicly-held property. In Suffolk County, the disposal of development rights by the County could only occur upon the approval of voters in a Countywide referendum.

Disposition of development potential under TDR is of course accomplished by transfer from sending to receiving parcel. Once all development rights are transferred, a deed restriction is recorded against future development on the

⁸Note. 84 The Yale Law Journal: 1121.

⁹Construction of new farm structures, houses for children of the farmer and for farm workers, etc..

parcel. Rights are not transferable back to the sending parcel, but additional rights may be created at the sending parcel through downzonings.

5.2 ECONOMIC CONSIDERATIONS

The economic impacts of PDR and TDR are similar in many respects. The overall economic impact of PDR in terms of the public cost commitment, however, is generally far in excess of the overall economic impact associated with TDR. Unlike TDR, PDR does not operate within a private market. The cost of farmland preservation under PDR is totally a public cost. Sale of development rights between private parties under a TDR scheme removes part of the cost burden of farmland preservation from the public and redistributes this burden among the purchasers of development rights, or among those who are most likely to benefit from provision of public infrastructure (e.g., developers, speculators).¹⁰ Thus, TDR affords the public an opportunity to recapture upon public investments in infrastructure, while at the same time decreasing the public farmland preservation cost commitment.

¹⁰ Redistribution of the cost burden is arguably justifiable, as under conventional zoning the landowner or developer in a service-zoned area is likely to receive service benefits far in excess of those which should rationally be related to the level of taxes or assessments paid. By the same token, the landowner outside of the service-zoned area is likely to be taxed or assessed for a level of service benefits far in excess of what is actually provided.

PDR does neither of these things.

Both PDR and TDR will result in shifts in the real property tax burden from participating realty to non-participating realty. These shifts will result as the assessed value of participating realty is lowered through the removal of the development potential from the land. Shifting of the real property tax burden should generally be a one-time proposition with PDR, but may be more than a one-time proposition if the PDR program is financed and carried out in stages, as is the case in Suffolk County. TDR may also involve more than a one-time shift in real property tax burden, if rezonings are accomplished to create additional development rights in the sending zone. The size of the real property tax shift is likely to be greater in any case for PDR, due to the almost certain necessity of having to raise real property taxes to fund debt service payments on development rights purchase bonds.

Given that PDR and TDR will reduce the development potential of the community in which development rights are purchased or transferred from, it is possible that PDR and TDR may result in increased housing costs in the community. With supply reduced and demand unchanged, the equilibrium price of developable land will increase, reducing the development of housing in the lower price ranges.¹¹

Similarly, if the attractiveness of the community as a place to live is increased by PDR or TDR, then it may be expected that land prices and housing costs will also be increased.¹² These potential side effects of the use of PDR and TDR may very well work to increase the total cost of the preservation program and, more particularly, work to increase the public's cost commitment to the program.¹³

Both PDR and TDR have numerous hidden costs associated with program implementation and operation. For PDR these costs include such things as land survey and assessment costs, staff expenses, record keeping costs, and the costs of drawing up bidding forms, purchase contracts and deed restrictions. For TDR these costs include such things as record keeping costs, the cost of drawing up deed restrictions, staff expenses, and transaction costs--costs incurred by buyers in locating and negotiating with sellers, and in completing the necessary legal documents.¹⁴ While the public bears many of these hidden costs with PDR, many of -----

¹¹Merriam, p. 124.

¹²Merriam, p. 124.

¹³It may be possible to avoid these potential effects, or at least to avoid the potential effect of increased housing costs, through use of inclusionary zoning programs and techniques. Such programs and techniques would provide incentives and bonuses for the developer, to encourage the construction of lower-income housing.

¹⁴Conklin, p. 15.

these hidden costs are borne by the private sector with TDR.

5.3 ADMINISTRATIVE CONSIDERATIONS

PDR and TDR each present their own unique set of administrative problems and complexities. While it is not clear-cut which concept is administratively more complex with respect to program establishment and implementation, TDR would appear to be more administratively complex with respect to program maintenance.

Most of the administrative effort which is expended with regard to PDR is expended during PDR program establishment and implementation. There is a great deal of work which must be done prior to the purchase of development rights, but once rights are purchased there are only two steps which may need to be taken: enforcement of contract or deed restrictions and/or the disposal of purchased development rights.¹⁵ The former would occur only upon violation of contract or deed restrictions, while the latter would occur only if some need arose to increase the supply of developable land.

¹⁵There is a possibility that a third step could exist here: payment of installments on the purchase price of the development rights acquired. In Suffolk County this was not the case, as lump sum payments were made at time of purchase.

Program maintenance is much more complex for TDR. Once a market is created for TDR it must be maintained, or else the TDR program may very well fail for lack of a market. Maintaining this market may involve downzonings or, in a case where downzonings would be impractical,¹⁶ may involve the funding of a development rights bank. For downzonings to occur there would have to be sufficient rationale, which most probably would be presented in the form of a revised comprehensive plan. Funding of a development rights bank would likely involve gaining approval from the local governing body (and perhaps gaining approval from the voters) to float bond issues to raise the needed cash. In either case the TDR program is quite vulnerable to the vicissitudes of the local governing body during the TDR program maintenance phase, which makes program administration during this phase even more difficult.

Program establishment and implementation is administratively complex for both PDR and TDR. Administrative tasks for PDR program establishment and implementation would include designation of criteria for the choice of parcels, development of bidding procedures,

¹⁶Downzoning would be impractical (and most probably illegal) if the downzoning were to create a situation where the landowner would not be able to realize a reasonable return from developing his/her land at the density permitted by the downzoning. Downzoning would also be impractical in the face of a low demand for high-density housing.

surveys and assessments of chosen parcels, drafting of purchase contracts and deed provisions, and formulation of payment procedures and alternatives. For TDR program establishment and implementation, administrative tasks would include the designation of sending and receiving areas, design of allocation and distribution systems for development rights, creation of a transfer mechanism, establishment of development right taxation procedures, and creation of a records system to keep track of development rights transactions and to record deed restrictions. A great deal of time and effort would go towards the administration of PDR and TDR programs during the establishment and implementation phases of each. An early administrative task for each type of program would be the determination of staff requirements and the procurement of the necessary staff.¹⁷

An area of program administration common to both PDR and TDR would be taxation. Taxation of development rights under TDR is less clear than taxation under PDR. Under PDR the only taxation which occurs is upon the value of the development right sold, this value being treated as a capital gain pursuant to the Internal Revenue Service Code.¹⁸ It may be assumed that the seller of development

¹⁷Staff requirements could be fulfilled through the services of a full-time program staff, in-kind services from the staffs of various governmental departments, contracted services, or combinations thereof.

rights under a TDR system would be taxed on his/her gain in the same manner, but how should the person who buys and holds development rights as an investment have his/her rights taxed? There undoubtedly is a need to establish administrative and legal guidelines for the taxation of development rights as personal property under TDR.

The administrative complexities associated with PDR and TDR during their respective program establishment and implementation phases are present to varying extents as requirements of national, state and local statutes and regulations. Part of the administrative complexity associated with TDR during these phases may be tied to legal requirements concerning the establishment of a rational basis for the choice of sending and receiving areas. This rational basis comes, of course, from the integration of the TDR scheme into the larger scheme of development for the community. Given that TDR involves the imposition of a heavy regulatory burden upon a chosen few, the establishment of a justifiable basis for regulation through the planning process is what gives TDR legal respectability. The fact that the planning process from which this basis flows is a continuous process complicates the administration of the TDR scheme, as the scheme must necessarily be adjusted to

¹Internal Revenue Service Code, Secs. 1221, 1231.

reflect changes imposed through the planning process.

5.4 POLITICAL CONSIDERATIONS

Political acceptance is critical to the successful operation of both PDR and TDR. The most basic step towards gaining acceptance for the use of either tool should be the establishment and implementation of provisions for citizen participation in program establishment, implementation and maintenance. Citizen participation is most crucial in the early stages of program development, to develop a program considerate of citizen needs and to establish trust and understanding between citizens and government. Since "citizen participation should facilitate the mutual adaptation of government and citizen,"¹⁹ the degree of public involvement and governmental responsiveness in the development of PDR and TDR programs can be crucial to the effectiveness of such programs.²⁰

The overall political acceptance of PDR as a tool for agricultural land preservation hinges primarily on getting the public to accept the cost of PDR. In times when there

¹⁹Peterson and McCarthy, note 4 (Chapter III), p. 461, citing "Citizen Participation in State Government: A Summary Report to the Office of Exploratory Research and Problem Assessment Research Applied to National Needs" (National Science Foundation, Washington, D.C., December [1973]), p. 17.

²⁰Peterson and McCarthy, note 4 (Chapter III), p. 461.

is great public resentment of and opposition to increased public spending, this may prove to be too difficult and dangerous a task. This would be particularly true at the local level, as the cost of PDR is neither scaled to the size of the local population nor related in any certain way to the ability of the local population to bear the burden of program cost. State-level financing of development rights purchases is a more politically palatable solution which is being attempted, but is a solution which may not be particularly suited to specific local needs.²¹

The overall political acceptance of TDR as a tool for agricultural land preservation hinges on a number of factors. One of these factors would most certainly be the ability of the planning staff to explain the TDR concept to local government officials, landowners and other citizens. TDR is admittedly a new and complex concept in land use management, and there may be fear of the consequences of the introduction of a strange and new concept into the body of property law.²² Careful explanation of the TDR concept could go a long way towards helping to allay any such fears.

²¹The addition of another administrative level in the PDR process may slow the rate at which development rights purchases are made, which would be disadvantageous to localities in situations where time is of the essence (e.g., when a large parcel of critical farmland suddenly appears on the market).

²²See Rose, note 82 (Chapter IV), p. 17.

Political acceptance of TDR also hinges on the willingness of landowners in sending areas to accept development rights as compensation, and on the willingness of landowners in receiving areas to accept higher density development. In the Olney Planning Area in Montgomery County there apparently have been more problems with the latter than with the former; but with as active a housing market as that which exists in the metropolitan Washington area, the landowners in Olney's sending areas most probably had sufficient reason to believe that their rights would bring a reasonable return in the market.²³

The success of PDR and TDR over time depends upon the ability of those administering and promoting the preservation program to maintain political support for the program through changes in both public attitudes and political leadership. This may prove more difficult for TDR because of the on-going nature of TDR. However, maintaining this same support for PDR may prove to be just as difficult if the PDR program drags on without any appreciable measure of progress being made along the way.²⁴ Rapid program

²³Whether or not they will have sufficient reason to believe the same in the future remains to be seen. After the first four months of program operation in Olney, there have been no transfers.

²⁴In the final note this is why Suffolk County chose to de-emphasize PDR.

implementation is most preferable in either case, as the more time a program is left open to criticism the more likely a program is to be hurt or dismantled by criticism.

Chapter VI

SUMMARY AND CONCLUSIONS

Among the most critical and pressing of problems facing our nation today is the problem of agricultural land conversion. Many estimates have been made of the scope of this problem, the most frequently cited estimate being three to five million acres annually lost to other uses.¹ Such losses not only pose a threat to farming as a way of life, but decrease the amount of cropland available in an age when demand for American agricultural products is increasing and yields per acre are leveling off. Such losses can only translate into higher production costs where production is forced from prime agricultural lands onto more marginally productive lands, where production costs per acre are higher. These concerns and others have prompted numerous responses from both the public and private sectors, the aim of such responses being the maintenance of productive agricultural lands in active agricultural use. Two of these responses, purchase of development rights (PDR) and transfer of development rights (TDR), have been receiving an ever increasing amount of attention throughout the United States as tools for the preservation of agricultural land.

¹Dideriksen, Hidlebaugh and Schmude, note 1 (Chapter II).

PDR is based on the recognition that ownership of land consists of a "bundle of rights," of which only one is the right to develop it.² The acquisition of development rights consists of severing from the absolute fee title the right to develop the land, leaving the owner in possession of the remainder of the fee title.³ Although there exists at least one early reference to this concept,⁴ application of the concept of PDR as a tool for agricultural land preservation did not occur until the mid-1970's, when Suffolk County, New York, implemented a PDR farmland preservation program. First of its kind in the United States, Suffolk County's PDR farmland preservation program has resulted in the purchase by the County of the development rights to over 3,000 acres of farmland in the County at a cost of approximately \$9,600,000. While the County has chosen to recede from its previous commitment to PDR as the centerpiece of its agricultural land preservation program, there remains a commitment of some \$21,000,000 for future purchases of the development rights to farmland in the County.

²Coughlin and Plaut, note 2 (Chapter III).

³Coughlin and Plaut, note 3 (Chapter III).

⁴Newton and Boast, note 6 (Chapter III).

TDR, like PDR, is based upon the recognition of the severability of the development right from the "bundle of rights" which accompanies fee ownership of land. Unlike PDR, however, TDR recognizes the transferability of the development right from one parcel to another. First applied in New York City during the late 1960's as a tool for historic preservation, TDR has since found use in suburban and rural communities throughout the United States as a tool for agricultural land preservation. One Maryland County, Montgomery County, recently adopted a plan which proposes and sets forth guidelines for a TDR agricultural land preservation program. While not yet operational, prospects appear good that this program will be operational in the very near future, as there currently is a great deal of momentum behind farmland preservation efforts in Montgomery County.

PDR and TDR represent separate and unique concepts in land use management, each with its own set of peculiarities, advantages and disadvantages, which should be carefully evaluated by those interested in making use of either concept. Choice of either, neither, or both of these techniques should follow from the careful investigation of a broad range of considerations, which for evaluative purposes may be grouped into the categories of legal, economic,

administrative, and political considerations. While the investigation of PDR and TDR is facilitated through the use of this format, no clear answer surfaces therefrom as to which tool is the "best" one. Clearly, PDR is more expensive than TDR, and TDR is more complex than PDR, but these factors are not viewed in the same light everywhere; the relative importance of these and other factors differs from place to place, thus choice of a farmland preservation alternative should consider the absolutes of each available alternative in light of local needs, opportunities and constraints.

In comparison to conventional police power tools such as zoning, both PDR and TDR have the potential to be more effective tools for agricultural land preservation. This potential is present because land can be preserved in a more permanent sense through the use of PDR and TDR than through the use of the more conventional police power tools. While potential is present, there is a long way to go before it may be fully realized. In order to realize this potential and to make PDR and TDR more effective agricultural land preservation tools than they have proven to be in applications to date, certain steps must be taken.

For PDR to be a more effective agricultural land preservation tool, its use should be more closely related to

the use of more conventional police power tools for agricultural land preservation. PDR is an expensive proposition, and should be used primarily to increase the effectiveness of tools already in use. For example, PDR can be used to create buffer strips separating different land uses. The existence of an agricultural - open space buffer between urban and agricultural areas would provide a barrier of sorts to urban development, and would therefore help to maintain the integrity of the agricultural area. Thus, PDR should be applied strategically, with the thought in mind of increasing the effectiveness of tools already in use.

In order to make PDR a more widely applicable tool, funding for program purchases should be available from Federal and state sources. The benefits of agricultural land preservation extend beyond local boundaries, and should be paid for by those apt to enjoy such benefits. The local population cannot and should not be expected to bear all of the costs of providing a region's open space needs, or of preserving land in agricultural use so that the nation can continue to enjoy its favorable agricultural trade surplus. Costs should be distributed among the entire benefit population, not just among the local benefit population. Federal and state funding of PDR program purchases provides a means whereby costs may be more equitably distributed, and

in doing so provides a means whereby PDR may become a more widely applicable tool for agricultural land preservation.

For TDR to become a more effective and widely applicable agricultural land preservation tool, uncertainties surrounding its legality and place in law will have to be dealt with. Court challenges of TDR have been few to date, and have provided little opportunity for a legal assessment of TDR beyond the issue of development rights marketability. Instead of tempting legal fate by waiting until TDR is further challenged, it would be instructive to conduct a forum to further explore TDR and identify all potentially troublesome aspects of the concept. Where legal questions concerning the validity of the concept are raised, these questions could be afforded treatment through a moot court of legal experts in the field of land use law. While such treatment would by no means establish the legal validity or invalidity of the concept, it would surely help to better define the possible range of legal attitudes and reactions to the introduction and application of the concept.

For TDR to be a more widely applicable tool, information on the use of the concept will have to be more widely distributed. TDR, approximately a decade after it was first introduced, remains a strange and not-well-understood addition to the body of land use law and regulation. If its

use is to be more widespread, efforts should be made to disseminate information on the concept, including the legal questions surrounding its use, the basic elements of a TDR program, and the administrative mechanisms for implementation. While no specific recommendation can be given regarding an appropriate disseminator, it should be an organization with sufficient resources to undertake a nationwide educational campaign on behalf of the use of TDR for agricultural land preservation purposes.

Finally, for TDR to become a more effective and widely applicable tool, the planning profession will have to "straighten house." Stated otherwise, the planning profession will have to develop additional and more concrete justifications for the use of TDR, to create a broader legal base for the concept to rest upon. Planning techniques such as environmental impact analysis and carrying capacity analysis must be further refined, information concerning their use disseminated, and their use promoted as part of the comprehensive community planning process. Through the use of these techniques and others, a community must be able to establish a strong case for increasing densities in one area and for preserving another area in its natural state or in agricultural production.

The prevailing practice today in choice of farmland preservation alternatives appears to be moving in the direction of greater flexibility for autonomous local choice. Previously this was not the case, as farmland preservation was very often a case of local implementation of a specific state-level preservation scheme. A lack of success with many of these schemes may very well have led to changes, which in recent years have found more and more states providing for a broader range of non-mandatory farmland preservation alternatives for local use (e.g., agricultural districting in Virginia, PDR in New Jersey), the idea of course being to let the local government choose the alternative that is right for them. Changes in this direction are commendable, and should be further expanded to include a full range of potential farmland preservation alternatives in each and every state where farmland conversion is a concern.

Agricultural land preservation efforts across this nation are based upon the joint assumptions that agricultural land conversion is a problem, and is a problem which demands immediate attention. To some these assumptions may not appear valid, as agricultural production has been increasing steadily throughout this century; so steadily, in fact, that we must pay farmers not to produce certain commodities and to keep land out of production.

But the fact is that agricultural land is a non-renewable resource, and this fact cannot and must not be ignored for the sake of future generations. More than adequate supplies of agricultural lands may exist in this country for our own needs at present, but future population growth here and abroad could very well lead to a shortage of such land in the not too distant future, with potentially disastrous results. Planning for and accomplishing agricultural land preservation in the present will not be the total solution to future worldwide shortages of food; it will, however, be a mitigating factor.

Solutions proposed and attempted to date with regard to the agricultural land conversion problem all have one thing in common: all attempt to deal only with the symptoms of the problem while ignoring its causes. There are many causes of the agricultural land conversion problem, but the root cause of the problem is the belief in land as a commodity first and as a resource second. This belief evolved out of our nation's frontier heritage, and the doctrine of growth at whatever cost. Such belief is clearly inappropriate in a time of resource scarcity, for the behavior that this belief fosters only serves to deepen the void left by resource depletion.

The time has come for a change in belief, and for the more appropriate treatment of agricultural land as the natural resource which it truly is. A change in belief would involve the formulation of a new land ethic, one which is forged of our twin concerns for the land's proper use and its proper care.⁵ This new land ethic must be a product of education and social evolution.⁶ Education is logically the first step, for it is through education that social evolution takes shape. The environmental movement of the 1970's did much to advance the cause of environmental education, but much remains to be accomplished--particularly in the area of agricultural land. Whether or not we will have an adequate future supply of agricultural lands for our needs and the needs of others will depend upon the success of public educational efforts in bringing about the societal-scale attitudinal changes necessary to forge a new land ethic. Until these changes do occur, we may have to be content with our current piecemeal approach towards the problem of agricultural land conversion.

⁵Neil Sampson, "A New Land Ethic" (paper presented at The Conference on Rural Conservation, Washington, D.C., 14 June 1980), p. 6.

⁶Sampson, p. 7.

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