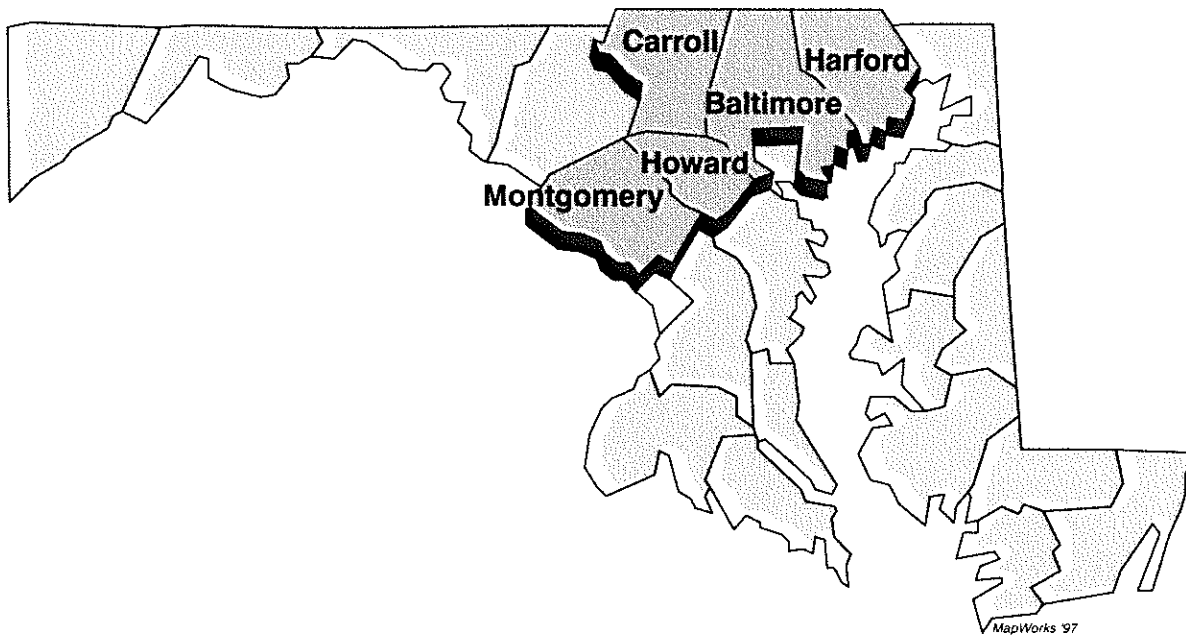


SECTION TWO: PUTTING IT ALL TOGETHER

CHAPTER 9: MARYLAND CASE STUDY

MAP 9.1: MARYLAND CASE STUDY COUNTIES



With millions of chickens being raised on the Eastern Shore, thousands of acres of tobacco being grown in the southern region of the state and cows grazing much of its western tier, Maryland is one of the most important agricultural states on the East Coast. From an economic standpoint, the agricultural industry is important because Maryland's farm products are worth almost \$1.2 billion annually. From a national standpoint, the state is also a critical player, ranking eighth in the nation for broilers, 10th for tobacco, 14th for greenhouse and nursery products and 21st for soybeans¹.

STATE AND COUNTY
 FARMLAND PROTECTION
 PROGRAMS IN
 MARYLAND

Maryland is also a very desirable place to live. With Washington, D.C., at its heart and Baltimore dominating the northeastern region of the state, Maryland attracts people because of its exceptional employment opportunities. While most of the state's businesses benefit from the strong economy and job market, agriculture often suffers. Residential and commercial development drives up land prices and causes conflicts between farmers and their non-farming neighbors, which often drives agricultural operations out of business.

Between 1945 and 1970, Maryland experienced a population and development boom that spawned one of the nation's most aggressive efforts to protect farmland. The amount of agricultural land in Maryland decreased by one-third during this period, from 4.2 million acres to 2.8 million acres, as the state lost an average of 55,000 acres per year. Urban sprawl was the primary cause of conversion.

The loss of farmland was a concern for all who recognized the importance of Maryland's agricultural industry. In the mid-1970s, more than \$2.3 billion—14 percent of the state's gross product—came from agriculture. Farm interests realized that the industry needed a critical mass of land to keep farming profitable in the future. Retaining a critical mass is necessary to ensure that farmers will have enough land available to expand their operations, and that farms will not become surrounded by non-agricultural land uses. Maintaining large blocks of farmland also supports agricultural businesses such as feed and equipment dealers and slaughterhouses. A state-appointed committee estimated Maryland's critical mass at two million acres.

STATE FARMLAND PROTECTION PROGRAMS

Differential assessment

Maryland first addressed farmland conversion in 1956 when the state legislature enacted a differential assessment law. The law allowed local governments to tax farmland based on its value for agriculture, rather than its fair market value. Differential assessment was an important innovation, but it was not enough to stop farmers from developing their land or selling it to others.

Attempts to regulate land use

In the early 1970s, the Maryland legislature rejected two proposed pieces of legislation that would have addressed farmland conversion. One would have created a state land use agency with the power to designate areas of critical concern. The other would have established guidelines that local governments would have used to adopt and implement land use plans. Farmers were critical of these efforts because they were mandatory. Farmers were also suspicious of state-level regulations².

The Maryland Agricultural Land Preservation Foundation

In 1973, Maryland's Secretary of Agriculture created the Committee on the Preservation of Agriculture. One year after its inception, the committee recommended the establishment of a statewide program to purchase agricultural conservation easements on farmland. At the time, PACE was a very new concept—Suffolk County, N.Y., was the only jurisdiction with a program. Legislation to create the Maryland Agricultural Lands Preservation Foundation passed in 1977 with little controversy. MALPF was staffed by an executive director working under the guidance of a nine-member, governor-appointed board of directors, and was charged with acquiring permanent agricultural conservation easements.

The challenge came when MALPF began to develop guidelines for creating agricultural districts and acquiring easements. Farmers opposed proposals for mandatory agricultural districts and permanent easements. Local governments opposed the use of open space funds to purchase easements, because they feared that this would jeopardize their ability to acquire land for parks and recreation³.

It took a year to resolve these issues. In 1978, the General Assembly approved legislation creating the Maryland Agricultural Lands Preservation Program (MALPP). Farmers were given the option of enrolling their land in voluntary agricultural districts. Easements were to be acquired with the intent of being held in perpetuity, but landowners would be allowed to petition to extinguish them after 25 years if profitable farming was no longer feasible on the land. The program was funded by real estate transfer taxes and by taxes assessed on agricultural land converted to non-agricultural uses.* In addition, the state gave priority to easements with the lowest value. This lowered the cost of the program, thereby leaving more funds available to protect other important land resources.

Once the specifics were worked out, MALPP grew quickly. The program protected almost 100,000 acres of farmland in its first 14 years. Its success was due in large part to its creative funding source. The policy of looking for bargains encouraged landowners to discount the price of their easements. Discounting has contributed to the success of Maryland's program by saving the state more than \$36 million, which allowed the purchase of easements on an additional 23,000 acres of agricultural land⁴.

MALPP had its most successful year in 1991, but it also suffered a severe setback. In response to a state budget shortfall, the General Assembly transferred \$17 million from MALPP to the general fund. The legislature approved a special capital bond appropriation of \$7 million to fund the PACE program for several years, but this was not enough to bring it back to previous levels. Annual funding for PACE has ranged from approximately \$9 million to \$13 million since 1993, compared to \$20 million to \$35 million in the 1980s, partly because of tighter state budgets. A lull in the building industry also reduced funding for PACE in the 1990s because of the program's dependence on revenues from real estate transfer taxes.

*Maryland has two real estate transfer taxes. The agricultural transfer tax is collected on land that is removed from agricultural production. The amount of the tax ranges from 3 percent to 5 percent of the sale price, depending on the type and condition of the property. These revenues are dedicated to funding the PACE program. Revenues generated by an additional 0.5-percent tax on the value of all real estate transfers are divided between parkland acquisition and farmland protection

The drop in funding for PACE reduced the number of easements the state could purchase. The program has added only 28,000 acres since 1993, making it one of the slowest-growing PACE programs in the nation, although it is still considered to be very successful. The slow pace of purchases has meant long waiting lists to sell an easement, which has reduced farmers' trust in the program.

THE EMERGENCE OF COUNTY FARMLAND PROTECTION PROGRAMS

As the strength of the state PACE program has diminished, several counties have created and improved their own farmland protection programs. One strategy has been state certification. If a county demonstrates to MALPF and the Maryland Office of Planning that it has an effective program to preserve agriculturally viable farmland, it may retain 75 percent of the agricultural transfer tax revenues generated within its jurisdiction. The funding may be used to provide a local match to the state's easement program, or to fund an independent county program. Counties that are not certified retain just 33 percent of their agricultural transfer tax revenues. The certification program was created in 1990. As of 1996, 11 of Maryland's 23 counties had become certified.

Counties also are filling the gap by creating their own PACE programs. Nine county programs have been created. Several other counties want to create programs but cannot do so because of funding limitations. The desire to start local farmland protection programs is particularly strong on Maryland's Eastern Shore, where applications to sell easements to the state program tend to receive low priority because of the way the state calculates development pressure. Properties within 100 miles of Baltimore or Washington, D.C., receive a higher ranking than properties outside these areas. Eastern Shore communities are beyond these "development hubs," but face conversion pressure from closer cities, such as Salisbury, Md., and Dover, Del.

Counties that create their own PACE programs have more control over funding and regulations than those that rely solely on the state program. For instance, Montgomery, Howard and Harford counties have developed their own systems for valuing easements. Under the state program, the value of an easement is determined by conducting two appraisals to calculate the fair market value of the land, and by using a formula to determine the agricultural value. The agricultural value is then subtracted from the fair market value to determine the easement value. The three county programs do not use appraisals, which are time-consuming and rely on the real estate market rather than the strength of the farm operation or quality of the land for agriculture. Instead, these counties use a point system to value easements. The system establishes a base price for easements and outlines a list of conditions that may increase or decrease that price. Points are awarded for criteria such as the size of the farm, soil quality, use of innovative farming practices and implementation of a conservation plan. In counties that have their own PACE programs, landowners may submit applications to either the state or county program.

Counties are likely to become more involved with farmland protection in the future. The Maryland Economic Growth, Resource Protection, and Planning Act of 1992 requires that county comprehensive plans be amended to address seven "visions" established by the state. These visions include concentrating development in suitable areas, directing growth to existing population centers and conserving natural resources⁵.

Maryland counties use other techniques to protect farmland, including TDR and APZ. Private organizations also are involved in farmland protection. Forty land trusts in the state have purchased or placed easements on more than 70,000 acres of farmland. This includes approximately 25,000 acres protected by the quasi-public Maryland Environmental Trust.

The Rural Legacy Program

The Maryland General Assembly made a major commitment to farmland protection in 1997 when it approved the Rural Legacy Program. Rural Legacy seeks to combine the interests of the agricultural and environmental communities. Through the program, the state will work in cooperation with local governments and land trusts to purchase conservation easements on agricultural land that has important natural resource value.

The Maryland legislature made a commitment to funding Rural Legacy sooner rather than later. The state will use bonds to support the program at the level of \$71 million to \$90 million during the first five years, and hopes to spend between \$243 million and \$455 million over 15 years, depending on which type of bonds are used and how the interest is paid.

Rural Legacy is creative because it emphasizes the need for local communities to make decisions about what land to protect. Local governments submit funding applications to the state. Communities that use strategic planning to protect large blocks of land receive priority over those that use a scattershot approach.

OUTLOOK FOR THE FUTURE

Maryland's state and county programs had permanently protected approximately 198,000 acres of farmland as of the end of 1996. Most of the activity has taken place in a five-county region that spans the northern tier of the state. These five counties—Carroll, Montgomery, Howard, Baltimore and Harford—experienced the earliest and most intense development pressure from Baltimore and Washington, D.C. Despite the success of farmland protection efforts in this five-county area, a 1997 American Farmland Trust report ranked the Northern Piedmont area, which includes northern Maryland, as the second-most-threatened agricultural area in the country.

Development pressure remains a serious threat to Maryland's agricultural industry, and farmland protection efforts are not keeping pace with demand. The state is still losing 1.7 acres of farmland for every acre it protects⁶. Also, with 2.1 million acres of farmland left, Maryland is close to the 2-million-acre critical mass level that the state determined was needed for agriculture to remain a viable industry. State and county farmland protection programs will face their toughest test over the next decade. Fortunately, the efforts of the past can serve as a strong foundation and guide for the future.

INTRODUCTION

With almost all of its soils suitable for some form of agriculture, Carroll County is one of the most important players in the state's agricultural industry. Fifty percent of its acreage can be cultivated regularly, 20 percent can be cultivated by using crop rotations, 14 percent is suitable for no-till farming and 13 percent is suitable for silvicultural practices⁷. The county also is an attractive place for development. Located approximately 50 miles north of Washington, D.C., and west of Baltimore, Carroll County is within commuting distance from both cities but still has a rural feel and relatively low property costs. It is often called "the Poor Man's Potomac," a reference to an upscale rural community that lies just outside Washington, D.C.

FARMLAND PROTECTION IN CARROLL COUNTY

From 1970 to the mid 1990s, Carroll County's population increased 104 percent, to 125,000 people. Half of this increase occurred during the 1970s, when the county was losing approximately 5 percent of its agricultural land annually. Nearly 70 percent of residential development took place in the rural area of the county, well beyond town centers⁸.

By the end of the 1970s, farmers and non-farmers began to see the importance of protecting the remaining agricultural land. Through the use of several farmland protection techniques, particularly PACE and APZ, the county successfully slowed the rate of development in the agricultural area. While 70 percent of residential development in the 1970s took place in rural areas, today that amount is down to 22 percent, with most houses being built closer to town. As of 1997, the county had permanently protected approximately 23,000 acres of farmland with easements purchased through the state PACE program. This accounts for 14.6 percent of Carroll's land in farms as of 1992⁹. Farmers and owners of agricultural businesses in Carroll County generally support farmland protection and are optimistic about the future of agriculture in the area.

TECHNIQUES AND STRATEGIES

Purchase of agricultural conservation easements program

In 1978, Carroll County was one of only three Maryland counties to recognize the value of the state's new PACE program. Along with Howard and Baltimore, Carroll County appropriated matching funds to participate in the MALPP. The program was particularly attractive to farmers at the time because, with only a few counties participating, substantial funding was available for each county. The county set a goal of acquiring easements on at least 100,000 acres of productive farmland, which county officials considered to be the minimum amount of land required to support agribusinesses. Between 1980 and 1985, the state acquired easements on more than 11,000 acres of farmland in Carroll County. Most of the farmers who sold easements were in the livestock business, where the desire to protect agriculture and its land base is strong because the investment in infrastructure is high¹⁰.

As more counties began to participate in the state PACE program, the amount of state funding decreased, and the rate of farmland protection in Carroll County slowed. It took the county more than 10 years to protect another 11,000 acres of farmland. Despite the drop in funding, county administrators still believe that the state program is the most effective PACE

option, because it offers the greatest amount of protection for the least amount of county money. In the 1996 fiscal year budget, county officials earmarked a record high of \$873,000 in general funds for use in the state PACE program and several county PACE programs.

As the MALPP became more competitive, Carroll County implemented additional farmland protection programs. The Local Incentive Program created in 1989 offers an alternative to landowners who are thinking about applying to sell an easement to the state. Under this program, the county conducts an appraisal of the property to be protected. If the landowner is satisfied with the appraisal, the land is enrolled in an agricultural district. The landowner receives a county payment equivalent to 5 percent of the value of the easement. An additional 5 percent is paid to the landowner if and when the easement is sold to the state. Landowners who are not satisfied with the county appraisal do not have to enter into an agricultural district. The Local Incentive Program was designed to increase the number of agricultural districts, the value of easements and the number of applications to sell easements. Between 1990 and 1991, 100 new agricultural districts were created and 50 existing districts were renewed for another five years. Also, 43 easements were sold, largely as a result of the county program. Despite this success, the program has not been funded since 1991.

Carroll County's Critical Farms Program, created in 1992, allows landowners to sell the county the option to buy their easement. The county pays 75 percent of the appraised easement value. In exchange, landowners must apply to the state PACE program. If the state approves the application, the landowner must repay the county. If it is not approved within five years, the county owns the easement, unless the landowner repays the county, with interest, in 30 days. In reality, given the limited state funds, the county's offer is the best price that landowners can expect to receive. The Critical Farms Program thus offers a guaranteed minimum easement price. Its budget is approximately \$300,000 per year, half from general funds and half from the agricultural transfer tax revenues. As of 1996, six farms totaling 725 acres had been protected through the program.

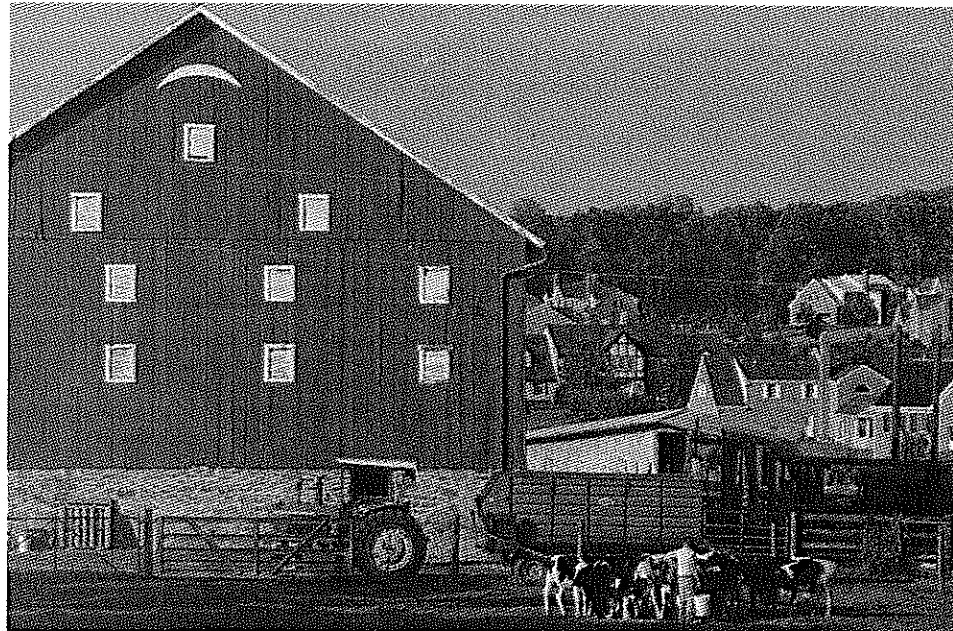
Agricultural protection zoning

Carroll County implemented agricultural protection zoning in 1978. Zoning amendments enacted that year limited development in the 184,000-acre Agricultural Zoning District to one lot per 20 acres. This district covers 64 percent of the county. Previously, zoning in the rural area allowed one lot per acre.

The need for the downzoning was supported, in part, by several studies done by the county planning department that documented the effects of non-agricultural land uses on farming. Farmers, however, were not impressed with the studies. They also were not convinced that the state's PACE program would help outweigh losses in equity caused by downzoning. Farmers strongly objected to the proposed zoning changes, arguing that the downzoning was a violation of their property rights. Several concessions were made to gain their support. Landowners in the rural area were given the right to develop the first two lots of a subdivision without following the new density requirements. These lots are called off-conveyances. Another tradeoff was increasing the types of uses permitted in the agricultural zone, such as farm machine shops and feed mills. Finally, the county provided financial support to nine designated growth areas (eight of which are incorporated towns). County funding is provided for public services, such as libraries and schools, within each of these areas.

INTRODUCTION

Montgomery County was the first county in Maryland to respond to intense development pressure. The rural county became a desirable place to live in the 1950s because residents could commute to Washington, D.C., easily by state highway. Montgomery's population more than doubled during the decade from 164,000 to 340,000, making it the fastest-growing county in the state. By 1960, half of its farmland was owned by people who were not involved in agriculture. Most of this land was in the southeastern part of the county, primarily around Wheaton and Kensington, where the prime soils are located¹¹.

FARMLAND PROTECTION
IN MONTGOMERY
COUNTY

Jeremy Green

TECHNIQUES AND STRATEGIES

Comprehensive planning

The intense growth of the 1950s and 1960s permanently changed Montgomery County's landscape. It also changed the attitudes of the people mapping the county's future. After witnessing the disappearance of agricultural land in the southeastern part of the county, county officials decided to protect the remaining farmland in the county's northwestern half. The county's 1964 General Plan established the need for preserving the countryside. In 1969, the County Council adopted a plan called *On Wedges and Corridors*. The plan recommended protecting agricultural land and open space. The "wedges" are the rural areas of the county, predominantly agricultural lands in the northwestern region, and the "corridors" are the municipalities in the southeastern section. The overall goal of the plan was to preserve the wedges by concentrating growth in the corridors.

In addition to this overall goal, *On Wedges and Corridors* was important for farmland protection advocates because it was the first public document in Montgomery County to recognize that farmland is necessary for the survival of the agricultural industry. Previously, agricultural land was valued primarily for the open space it provides.

Photo: Development pressure threatens farms in Montgomery County, Maryland

In 1973, Montgomery County hired a full-time agricultural resources coordinator and revised its zoning ordinance. The County Council changed the maximum density in the rural area of the county from one dwelling unit per acre to one dwelling unit per five acres. Although this was meant to be a farmland protection technique, it did not discourage growth. Enough people had enough money and the desire to develop at the lower density. During the 1970s, the county lost 3,000 acres of farmland annually, despite the so-called agricultural zoning¹².

In 1980, 11 years after the adoption of *On Wedges and Corridors*, Montgomery County approved and began to implement the Plan for the Preservation of Agricultural Land and Open Space. The plan recommended the use of two techniques to protect agricultural land: transfer of development rights and agricultural protection zoning. The combination of techniques was used because policymakers believed that the farming community would not have supported downzoning without some means of preserving their equity.

Since 1980, the county has been nationally recognized for its farmland protection programs and policies, particularly TDR. Despite continuing development pressure—in the 1980s, one-third of the development in the state was occurring in Montgomery County—the county has spent approximately \$18 million and permanently protected more than 43,000 acres of farmland. This represents almost half of Montgomery's total agricultural acreage.

The amount of farmland protected continues to rise while the amount lost to development continues to drop. As a result of the county's efforts and an emerging respect for agriculture as an industry, it is believed that farming has a viable future in Montgomery County.

Transfer of development rights program and agricultural protection zoning

TDR legislation was adopted in 1980, following an amendment to the zoning ordinance that created an 89,000-acre Agricultural Reserve in the rural area of the county and implemented APZ. Development was limited to one dwelling unit per 25 acres. A county study found that this was the minimum acreage that could support a farm family on a cash-crop, direct-market basis. It also was the most acreage the county felt it could require without being sued for depriving landowners of all economic use of their property¹³.

The Agricultural Reserve is also known as the Rural Density Transfer Zone. This district and another 30,000-acre rural zone are the county's TDR sending areas. Landowners in the sending areas are permitted to sell their development rights to landowners in designated receiving areas who want to develop their property at a higher density than is ordinarily permitted by the base zoning. One development right can be sold for each five acres of land; rights are sold on the open market.

The TDR program got off to a slow start. One of its initial problems was that not enough receiving areas were designated by the county. As a result, the supply of development rights far exceeded the demand, which made the rights less valuable than farmers had hoped. Based on a pilot TDR program in the town of Olney, farmers expected development rights to sell for \$15,000. When the countywide program began, however, development rights sold for

just \$4,000. In retrospect, it became clear that the price was high in Olney because the town had numerous receiving areas, and demand for development rights exceeded the supply¹⁴.

A lawsuit filed by a group of property owners from the Agricultural Reserve in the early 1980s charged that there was no market for development rights because there were not enough TDR receiving areas. A circuit court judge ruled against the plaintiffs, arguing that "...[S]ince the rationale for the downzoning did not hinge on the TDR scheme, the absence of receiving areas at the time of the downzoning need not be considered¹⁵."

Despite the judge's ruling, the county created more receiving areas. There are now 18 designated receiving areas located in planning districts that have been targeted for growth. While this has helped allay some concerns about the TDR program, the most effective solution to increasing the value of development rights was the creation of a county PACE program in 1989.

With the county purchasing easements, fewer development rights are available through the TDR program, thereby driving up the price of the rights. Within a month of the adoption of PACE, the value of development rights doubled. Development rights sold on the open market are still not as valuable as those sold to the county—\$2,000 per acre through the TDR program, compared to \$3,000 per acre through the PACE program.

Purchase of agricultural conservation easements program

Many agricultural landowners supported the establishment of the county PACE program because it increased the value of development rights sold on the open market. The county's strategic approach to buying easements has stopped high-density development from spreading into the rural areas of the county. In reviewing applications to the PACE program, local officials use a formula that gives highest priority to large farms on the suburban edge of the Agricultural Reserve. As of 1996, the county had purchased easements on approximately 5,400 acres of farmland. The protected farms form a quarter-mile buffer between the urban and rural areas of the county. The buffer functions as an urban growth boundary by preventing the extension of water and sewer lines from the urban area to rural lands.

More than two-thirds of easement sales in Montgomery County have been through the county PACE program. The remainder have been through the state program, using matching funds from the county. The county PACE program is more popular than the state program because the county's formula for determining the price of easements usually results in higher easement values. The formula is called "base plus." A base price per acre is set by the county every year. The county pays landowners this amount, and an additional percentage of the base price determined by land tenure and the following characteristics of the land: farm size, soil fertility, use of conservation practices, road frontage and proximity to development. The percentage-of-base formula lets the county adjust the entire price range by changing the base.

Landowners also prefer selling to the county because the state often takes too long to make an offer. By using its formula, the county can make an offer in less than six months. The state program can take twice as long because it relies on appraisals to set easement prices. Given the intense development pressure in Montgomery County, a quick turnaround is essential to protecting land. Finally, landowners are more likely to sell easements to the county

because the state PACE program gives low priority to applications from Montgomery County. Easement values are relatively high in Montgomery because the fair market value of land is high in comparison to other counties.

Agricultural marketing

In addition to using APZ, TDR and PACE to protect the land base, Montgomery County has implemented a marketing program to promote local farm products and services. Given the changing face of the county's farm sector, promoting agriculture is essential to the future of the industry. Farmers are developing enterprises that generate larger profits on smaller pieces of land, operating specialized and diversified agricultural businesses such as pick-your-own fruit and vegetable farms, nurseries and horse farms.

The Montgomery County marketing program has a variety of elements, including a farm directory, county-sponsored farmers' markets and an annual farm tour and harvest sale. The county facilitated direct marketing of farm products in 1990 when it relaxed regulation of roadside farmstands. Farmers are now permitted to sell produce that is not grown on their farms, as long this produce does not exceed 25 percent of total sales. The county also has produced signs for roads and vehicles and product stickers bearing the red, white and blue "Pride of Montgomery County Agricultural Producer" logo.

Coordination of agricultural services

Before 1996, Montgomery's PACE, TDR and marketing programs were administered from the county's strategic planning division. In July 1996, the county created a department of economic development and a new agricultural services division to house the farmland protection and marketing programs. Program staff were moved from the county offices in Rockville to the Agricultural History Farm Park in the town of Derwood, 20 minutes away. The Agricultural Services Division now shares offices with Cooperative Extension, the Natural Resources Conservation Service and the Farm Services Agency, giving farmers the advantage of "one-stop shopping." Division manager Jeremy Criss reports that having all of the county's agricultural services together under one roof has improved coordination. For example, Criss says that he is able to process applications to create agricultural districts in a fraction of the time it took when the agricultural agencies and services were in different locations¹⁶.

INTRODUCTION

FARMLAND PROTECTION IN HOWARD COUNTY

Equidistant from Washington, D.C., and Baltimore, Howard County has long been ripe for development. During the 1970s, Howard County was the fastest-growing county in Maryland. Population doubled during the decade to 118,000 residents, and for the first time in the county's history, development occurred at a faster rate in the rural areas than in the urban areas¹⁷.

Howard County's farmland protection movement began to emerge during this period. At the urging of a county councilwoman, a citizens' task force was formed in 1975. Called the

Work Force for the Preservation of Howard County Farmland, the group's efforts were backed by a variety of interests, including farmers, the Sierra Club, urban residents, rural residents, new county residents and Howard County natives. The state also showed its support by giving the task force a \$10,000 grant¹⁸.

TECHNIQUES AND STRATEGIES

Purchase of agricultural conservation easements program

The first recommendation of the Howard County task force was to create a local PACE program to supplement the state program. Although the MALPP had just started purchasing easements, the group felt that the program would not be effective in Howard County because land values were too high. There was little opposition to the proposal, and the County Council approved creation of a PACE program in 1982.

The PACE program was challenged by a resident who gathered enough signatures to require that the issue be placed on the next county ballot. The task force, which had become very well organized, quickly kicked off a dynamic campaign to promote the program. The campaign proved successful, and the program was approved by 54 percent of the county's voters¹⁹.

Initially, however, the county PACE program was not popular among farmers. The state program was more attractive because easement offers were higher than anticipated. This was primarily because just a few counties were participating, so there was not much competition for funding. Some of the requirements imposed by the county PACE program also discouraged farmers from applying. Landowners, for instance, were required to pay for appraisals and were fined if they did not keep protected properties in active agricultural use. Approximately 3,000 acres of land were protected through the MALPP by the mid-1980s.

The county program eventually became more popular, for two reasons. The first is that the unpopular requirements were eliminated. More important, though, as the state program became more competitive, the county's landowners began to receive lower easement offers from the state. In the late 1980s, the county program surpassed the state program in acreage protected. By then, the county had purchased easements on approximately 7,700 acres of farmland.

At the peak of its success, and at a time when development pressures were particularly intense, the county program stalled. It was offering an average of \$3,000 per acre for agricultural easements, while developers were paying as much as \$20,000 per acre for prime farmland. The low offers were partially due to a county policy of paying only 50 percent of the value of any easement.

The Howard County PACE program got a new lease on life in 1989 when it adopted an installment purchase plan to buy easements. The program was the first of its kind in the country. It allowed the county to pay landowners for easements in installments, with interest of no less than 6.5 percent. The payments are made every other year over a 30-year period, with the remaining amount of the purchase price paid in a lump sum at the end of the term. Interest on the outstanding balance of the purchase price is paid semiannually.

For landowners, this funding technique offers several advantages. Semiannual interest payments are exempt from income taxes. In some cases, property owners may defer recognition of any capital gain until they receive the principal amount. Installment purchase contracts offer flexibility in estate planning because they can be transferred. Property owners may be able to realize charitable tax deductions that are generally equal to the difference between the appraised value of easements and the price the county pays for them.

For the county, installment purchase agreements provide more money in the short term for the purchase of easements. The county funds the interest payments with proceeds from two real estate taxes—one-quarter of a 1-percent transfer tax on all real estate sales and one-third of a 5-percent transfer tax on all sales involving agricultural land. The lump sum payments are financed by the purchase of 30-year U.S. zero-coupon bonds. The bonds were purchased with \$9 million in tax revenues that had built up during the years that the county program was inactive. By using this method, the \$9 million and the expected future tax revenues were leveraged to purchase \$55 million worth of easements.

The \$55 million was spent between 1990 and 1996. During that time, the county purchased easements on about 8,500 acres of farmland, bringing the total amount of protected land to approximately 17,000 acres, nearly 40 percent of the county's farmland. More acreage was protected during the six years of the Installment Purchase Program than during the eight-year period that preceded it. Howard County's PACE program ceased operation in 1996 when the bond funding was exhausted.

The success of the county's PACE program was due to the innovative financing option, as well as the county's decision to lift the 50 percent cap it had placed on easement offers in the 1980s. Some easements sold for as much as \$6,000 per acre during the 1990s. Also, the county's system for valuing easements made the program appealing to landowners. Like Montgomery County, Howard County used a formula to value easements, rather than appraisals. Initially, the formula gave little weight to the location of the farm, such as its proximity to a wetland or steep slope. A new formula, adopted in 1993, gave highest priority to large parcels of land in the rural area with Class I soils, large road frontages, low residential density and a high score on the Land Evaluation and Site Assessment system. Finally, the success of the PACE program was due in part to a county property tax credit of up to 75 percent offered for land enrolled in an agricultural district or protected by an easement.

Agricultural protection zoning and density exchange option

Howard County uses zoning to protect farmland, but its regulations are weak in comparison to APZ ordinances in surrounding counties. The density in the rural area ranges from one dwelling unit per 3 acres to one dwelling unit per 4.25 acres, depending on the size of the parcel and whether the development is clustered. Four attempts to downzone land in the agricultural area to as few as one dwelling unit per 20 acres have been defeated.

Clustering and a density exchange option were implemented in 1992 as strategies to strengthen the zoning regulations. Clustering is mandatory in the Rural Conservation Zone, which is where most of the farms are located. New homes must be clustered on 20 to 40 percent of a parcel, depending on the size of the tract.

The density exchange option is very similar to TDR programs in other Maryland counties. It allows landowners in the rural area of the county who have parcels larger than 50 acres to transfer development rights to other properties within the rural area. Density is transferred at the rate of one development unit per 3 acres. In the receiving area, development is allowed at a density of one dwelling unit per 2 acres. The density exchange option is permitted only when the exchange is between a significant piece of farmland and a piece of property that can absorb the additional development without any adverse environmental impacts. All transactions occur on the open market. Approximately 700 acres of farmland have been protected through this program.

Agricultural marketing

When the PACE program came to an end, Howard County took a new approach to saving farmland. The county turned its attention to the business end of farming. At the recommendation of a committee of farmers that had been convened by the county executive, the county created an Agriculture Economic Council that acts as a subcommittee to the county's Economic Development Authority. The county also hired a full-time agricultural marketing specialist to head the subcommittee and to work one-on-one with farmers. The subcommittee was charged with four tasks: sustaining traditional farming operations, exploring new agricultural trends, understanding infrastructure needs and consolidating rural service agencies.

INTRODUCTION

In contrast to Howard County, which relied on PACE to stabilize its agricultural land base, Baltimore County began its farmland protection efforts by enacting agricultural protection zoning. Some speculate that this is because of the size of Baltimore County. With 83,000 acres of farmland in the county—almost twice as much as in Howard County—PACE seemed unrealistic. It would have been an expensive way to protect a relatively small percentage of the county's farmland. Others contend that Baltimore County chose a regulatory approach because zoning was well suited to address the pattern of development in its jurisdiction. Growth is concentrated in the southern half of the county, which borders the city of Baltimore. The more concentrated the land uses, the easier it can be to apply regulations that affect them²⁰.

FARMLAND PROTECTION IN BALTIMORE COUNTY

TECHNIQUES AND STRATEGIES

Comprehensive planning and agricultural protection zoning

Residents became aware of the need to regulate growth in the early 1960s, 10 years into what turned out to be a 25-year development boom in Baltimore County. Much of the early development occurred just north of the city of Baltimore, in an area dominated by broad valleys and wooded slopes. Planners predicted that future growth would follow the same path. Concerned residents formed a nonprofit group and hired renowned land use planner Ian McHarg to develop a growth management plan for their 45,000-acre region. McHarg's *Plan for the Valleys* was the first county document to strongly recommend an ecological approach to planning. Although the plan was never formally adopted, it stimulated a new way of thinking²¹.

McHarg's ideas inspired county planners who were alarmed by sprawl in the rural area. They proposed two new zoning districts to address the problem: one with a maximum density of one dwelling unit per 10 acres and one with a maximum density of one house per 3 acres. This was during the early 1970s, when lot sizes were controlled by state Health Department requirements for satisfactory percolation tests²². The maximum density was generally one dwelling unit per acre. The County Council adopted two new zones, but responded to developers' concerns by setting the density at one dwelling per acre.

In response to the Council's action, the Planning Department gathered data on sprawl and formed a task force to review the information and make recommendations. The North County Advisory Group was organized in 1974. It included farmers, local farm bureau representatives, realtors, developers, business people and other residents. The group's most significant recommendation was to create four resource conservation (RC) zones in the rural area, two of which would incorporate agricultural land, including forest land. It proposed sliding-scale APZ for the 100,000 acres in RC 2 zones, which encompassed 30 percent of the county. The proposed zoning would have allowed up to six dwelling units per 100 acres.

The four RC zones were created by the County Council in the mid-1970s, but regulations were less restrictive than those proposed by the Advisory Group. The new ordinance allowed 20 dwelling units per 100 acres in the RC 2 zone. In 1979, these regulations were amended to allow for one subdivision on lots of record that are between two and 100 acres, and one additional subdivision for each 50 acres thereafter. These limitations were designed to restrict the subdivision of larger parcels while allowing smaller parcels to be divided.

For nearly 20 years, regulations allowed one dwelling unit per five acres in the 46,000-acre RC 4 zone. In 1992, the County Council restricted development in this zone by implementing mandatory clustering. The clustering ordinance requires that development be restricted to 30 percent of each lot. The remaining land must be left in perpetuity for farming, forestry or open space. Clustering is permitted but not required in the RC 2 zone.

Although the downzoning actions were controversial among farmers and other landowners at first, eventually they were supported by residents. Farmland protection was not the driving force behind the changes. Rather, the stricter zoning regulations were designed to protect the rural reservoirs that are the main water source for metropolitan Baltimore. Nonetheless, the end result has proved beneficial for farming.

The local farming community was divided in its response to the zoning changes. Young farmers were vocal in their support and were heavily involved in the planning process. Other farmers were supportive because the agricultural industry was doing well, and protecting the land base made sense. Critics claimed that the new zoning took away their property rights.

The county has a growth management plan that directs growth to its southern section. The county planning board must approve water and sewer service extensions into the northern region. As a result of this plan, residents and farmers feel that the county is allowing for growth while still leaving room for agriculture.

Purchase of agricultural conservation easements program

Support for agricultural zoning also was enhanced by the County Council's decision to participate in the state PACE program. Farmers' interest in the state program has fluctuated since 1980. Low interest is generally correlated with low easement price offers from the state and strong development pressure, but Baltimore County farmers have historically been skeptical of PACE. The 1989 county master plan reflected that "[t]he farming community often sends mixed signals regarding the degree to which farmers want protection from development while farming, and flexibility to sell to developers upon retirement."

Overall, however, the county's landowners have been active in the Maryland Agricultural Land Preservation Program. As of 1996, the state had protected more than 11,000 acres of agricultural land through PACE. The county encourages participation in the program by offering a 100-percent property tax credit for up to 10 years on land that is enrolled in an agricultural preservation district.

To further increase interest in farmland protection, the county created its own PACE program in 1993. As in Carroll, Montgomery and Howard Counties, Baltimore County's program is designed to complement the MALPP; it has not, however, been implemented. The county still gets more leverage out of its funding source—agricultural transfer tax revenues—by providing matching funds to the state's PACE program.

Donations of easements

Baltimore County landowners have been generous in donating agricultural conservation easements to nonprofit organizations. In 1993 and 1994, easement donations exceeded sales through the state's PACE program. Easements on almost 7,000 acres were donated to the Maryland Environmental Trust, compared to 1,250 acres protected through the state program. Several local land trusts are active in encouraging landowners to participate in the MET program. Participation is high because of the appreciation for the land base and prosperity in the farming community. Landowners may also enjoy certain tax benefits when they donate easements on their land.

INTRODUCTION

The development boom hit Harford County in the mid-1980s, later than most of the counties in the case study region. Each year between 1985 and 1990, approximately 3,000 acres of farmland were converted to non-agricultural use, a critical loss for a rural county where agriculture is the most important industry. Since then the county has enacted several farmland protection programs that have proven effective in stabilizing much of the remaining agricultural land base. Most of the programs have originated from the county government, not the private sector, because the Harford County Council generally has been supportive of the agricultural industry.

FARMLAND PROTECTION IN HARFORD COUNTY

TECHNIQUES AND STRATEGIES

Purchase of agricultural conservation easements program

As of 1996, Harford County landowners had sold conservation easements on almost 15,000 acres of farmland to the state and county PACE programs. In 1989, the county began offering a 50-percent property tax credit on properties enrolled in an agricultural district. Soon afterwards, the county extended 100-percent property tax credits to owners of land protected by MALPP easements, up to a maximum of \$35 per acre. Both tax credits were later made available to landowners who participate in the county PACE program.

The tax credits were needed to encourage landowners to sell agricultural conservation easements. From 1978 to 1988, Harford County protected fewer than 3,500 acres of land through PACE. Landowners were wary of the MALPP because it was new and because offers from the state were low. One of the first people to sell an easement was a wealthy landowner who settled for a price of approximately \$350 per acre.

The tax credit was successful immediately and continues to be effective at generating enrollment in agricultural districts and interest in PACE. In the 10 years prior to the creation of the county tax credit program, only 9,000 acres were enrolled in agricultural districts. Within two years after the tax credit was offered, the amount of land enrolled in districts increased to 15,000 acres²³.

In 1988, a new county master plan identified deficiencies in the state PACE program and recommended that the county create its own program. The recommendation was implemented in 1992. The county PACE program has different priorities than the state program. The county gives top priority to high-quality land owned by full-time farmers who use best management practices. More important, local taxpayers believe that the funding source for the county program is more predictable than that for the state program. A secure funding source makes it easier for the county to make timely payments and a greater number of offers to landowners. The county program is funded by a 1-percent local real estate transfer tax. Half of the \$5 million in tax revenues typically generated each year is used for farmland preservation (the other half is earmarked for school improvements). The tax was approved by county voters by a 3-to-1 margin in 1992, despite concern that landowners would not support a tax that increases real estate closing costs. Maryland has some of the highest closing costs in the nation.

Another important feature of the county program is an installment purchase agreement option modeled after Howard County's installment purchase program. Landowners who do not want cash up front can sign installment purchase agreements. The agreements entitle sellers to annual tax-free interest payments and a small portion of the principal over a 20-year period. Participants receive the remainder in the 20th year as a balloon payment. Landowners can request cash payments for their easements, but if funding is not available, they may be required to wait until the next fiscal year before receiving payment.

Enthusiasm for the county program has always been high. Fifty-eight farmers applied to the program during the first year, followed by 80 the second year and 130 the third year. This compares to an average of 15 to 20 applicants per year to the state program before the county program was approved. Applications to the state program have increased to

approximately 45 per year since the county program was approved, due primarily to increased publicity for and understanding of PACE²⁴.

Agricultural protection zoning

Regulatory strategies have not been very successful in Harford County. The county has had what it calls agricultural zoning since 1957, but the initial intent of the zoning was to promote residential growth within a predominantly rural county. The maximum density was high—one dwelling unit per 0.5 acres of land—compared to the density in true agricultural protection zones.

In 1974, the zoning regulations were strengthened, but not to support agriculture. Rather, new regulations were designed to reduce the number of septic tank failures and well contaminations. The county passed an ordinance requiring a 40,000-square-foot septic reserve area around all septic tanks and decreased the allowable density to one dwelling unit per 2 acres. Farmers and developers loudly opposed the septic reserve area requirement, but county officials felt obligated to enact it because it was proposed by the county's health department as a means of protecting the health and safety of county residents. The regulation has been challenged unsuccessfully several times within the past few years.

Harford County planners drafted an amended master plan with new development restrictions in the mid-1970s. They recommended that the density in the agricultural zone be decreased to one dwelling per 10 acres. The proposed plan was opposed by both farmers and developers, and was not released until a new County Council president was elected in 1977²⁵.

The zoning ordinance was amended to implement the plan's recommendation. Although the new zoning was still lenient compared to requirements in other counties, farmers were generally opposed to the change. As a concession, the council created the Rural Residential In-Fill Area. In this zone, which applies to the small pockets of agricultural land between residential areas, landowners are allowed to apply for rezoning to residential use. In addition, landowners of record as of February 1977 were given the right to develop one lot for every child, sibling and parent. Landowners entitled to these family conveyances who owned more than one parcel were given the right to create lots for all entitled persons on each parcel. The result of these provisions was that landowners were permitted to develop at far greater densities than one house per 10 acres.

Harford County's agricultural zoning was strengthened in 1989, although it is still weak compared to other counties in the case study area. At the direction of the 1988 master plan, the minimum lot size in the Rural Residential and Agricultural zones was decreased from 2 acres to 0.75 acres to prevent unnecessary sprawl. Also, a maximum lot size of 2 acres was established. Previously, there was no maximum lot size. These changes have essentially the same effect as clustering because they allow landowners to keep a larger portion of their lots as open space. In 1995, the county adopted voluntary clustering in the agricultural zone and the Rural Residential In-Fill Area.

Development envelope

The creation of a “development envelope” in the southern part of Harford County has been more effective than agricultural zoning. The development envelope was proposed in the 1977 master plan and was created the same year the master plan was approved. The plan envisioned that 87 percent of the county’s growth would be confined to the 90-square-mile development envelope. This goal has not been achieved, but the development envelope has been successful in reversing the growth trends of the 1960s and early 1970s²⁶.

Agricultural marketing

Recognizing that techniques focusing on protecting the land may benefit the farmland more than the farmer, Harford County began to support agricultural marketing in 1990. The county’s goal is to help farmers make their operations economically viable. Through the program, the county has produced a directory of agricultural services and distributed it to 80,000 homes, sponsored several marketing workshops for farmers, created a Harford County Homegrown logo for locally grown produce, established a new farmers’ market and sponsored an annual farm fair.

Marketing efforts are overseen by a county-appointed Agriculture Task Force that consists of citizens and representatives of federal, state and local agencies. Since its creation in 1987, the task force has surveyed farmers about what kinds of initiatives could strengthen local farming, produced a video on farming in the county and pursued the possibility of creating a program for strengthening farm businesses and the local farming economy.

CONCLUSION

Working in conjunction with the Maryland Agricultural Land Preservation Foundation, the five case study counties have purchased easements on more than 46,000 acres of farmland. Carroll, Harford, Howard and Montgomery counties have protected an additional 30,000 acres of farmland through independent PACE programs. This record shows clearly that Maryland’s state PACE program has generated local interest and investment in farmland protection. Maryland leads the nation in the number of acres protected through PACE, and its county programs are among the nation’s most innovative.

Programs in Maryland provide good examples for other state and local governments that are considering PACE. Requiring local governments to contribute matching funds for easement purchases has leveraged local funding for PACE. Requiring enrollment in agricultural districts as a condition of eligibility for PACE has helped stabilize the land base. The tax benefits that Howard County offers to landowners who enroll in a district or sell an easement have increased participation in these programs. Installment purchase options in Howard and Harford counties leverage PACE funds and provide tax benefits to program participants. Finally, point systems for valuing easements in Montgomery, Howard and Harford counties decrease both the amount of time it takes to purchase easements and their cost.

Maryland is also well-known for its TDR programs. Montgomery County has protected more farmland through TDR than any other jurisdiction in the nation. Calvert County,

on the southern shore, also has a successful TDR program. Montgomery and Calvert counties provide models that other local governments can use to design effective TDR programs.

Several of the case study counties have recognized that protecting the land is only one of the challenges facing agriculture in areas threatened by development. Agricultural marketing programs in Montgomery, Harford and Howard counties are helping farmers develop new products and services and formulate creative strategies to sell them. Marketing programs also may increase public support for agriculture and farmland protection.

Two state programs are likely to increase local government involvement in farmland protection in the future. New local comprehensive plans guided by Maryland's growth management law are due to be complete in 1997. Many of these plans will include farmland protection elements. Local governments also will have access to new state funding for farmland and natural resource protection through the Rural Legacy Program. Agricultural communities on Maryland's eastern and southern shores can look to Carroll, Montgomery, Howard, Baltimore and Harford counties as they design programs to protect farmland and support agriculture.

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