

A STUDY OF PDR AND TDR FOR BOONE COUNTY, KENTUCKY

BOONE COUNTY PLANNING COMMISSION

September, 2001

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CHAPTER I: INTRODUCTION

To address the Adopted Goals and Objectives of the 2000 Boone County Comprehensive Plan, the Boone County Fiscal Court requested that the Staff of the Boone County Planning Commission conduct a feasibility study of two growth management tools which have been employed elsewhere in the United States. The purpose of this study is to evaluate how Purchase of Development Rights (PDR) and Transfer of Development Rights (TDR) programs have been used by other communities and to determine whether either technique may be appropriate in Boone County. This report describes the components and necessary implementation steps of each technique. Although PDR and TDR share some similarities, they are different tools, and the two techniques are treated separately in this study.

The past three decades have witnessed unprecedented growth in Boone County, in terms of everything from population to business activity to housing. During the years 1970 to 2000 the population of Boone County grew from 32,814 to 85,991, an increase of over 260 percent (2000 Boone County Comprehensive Plan [BCCP 2000], Table 2.1). The amount of base (e.g., agriculture, construction, manufacturing) and non-base (e.g., retail trade, services) industry has also grown dramatically since 1970 (BCCP 2000, Tables 5.1 and 5.4). With increases in population and business activity come increases in the number of housing units in the County. For example, the number of single-family detached, single-family attached, and multi-family housing units more than tripled in unincorporated Boone County between 1980 and 1999 (BCCP 2000, Table 6.2). All three of these indicators are expected to continue to increase over the next 20 years.

Boone County is clearly an attractive place to live and do business in and has earned a reputation as one of Kentucky's most livable counties. Although the recent growth has positively affected the County, it also has the potential to erode some of the unique qualities that make Boone County so attractive to people and business. While Boone County has benefitted from recent growth, it also continues to benefit from a wealth of natural and cultural resources, which are two factors that positively affect growth in the County.

There are many ways to encourage growth while maintaining existing natural and cultural resources: PDR and TDR are two techniques that have been developed, implemented, and evaluated in numerous communities across the United States. This study focuses on PDR and TDR, although other techniques are also described. It is important to point out that PDR and TDR may function as two tools in a toolbox of methods to accommodate Boone County's rapid growth. The two techniques that are the focus of this report, PDR and TDR, are discussed at length and illustrated through detailed case studies of existing programs from around the nation. Several alternatives to PDR and TDR are

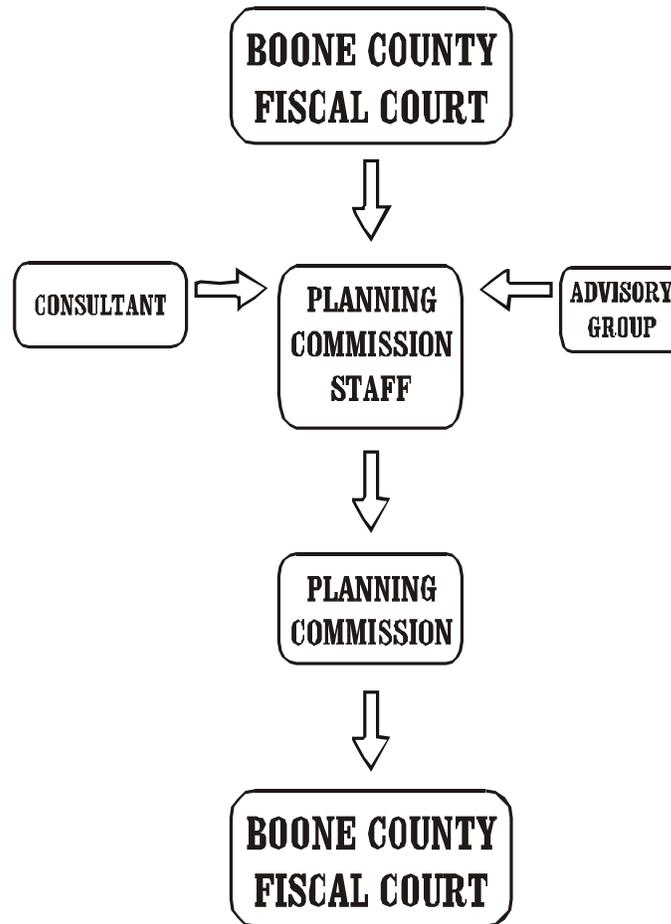
considered in a separate chapter. An analysis of the relevance to PDR and TDR to Boone County is then presented, followed by the study's Conclusions and Recommendations. In addition to a comprehensive bibliography, copies of most research materials are included in Appendix E.

THE PDR/TDR ADVISORY GROUP

An Advisory Group composed of individuals representing a range of interested parties in Boone County was assembled for this study. This Group was not a formal Committee and had no approval role in the production of this study. The study could not have been completed without the assistance and input of the Advisory Group members. However, please note that the contents of this report may not reflect the opinion of individual members of the group, who were not asked to vote on issues or adopt the study. The group was selected by the staff and created as a sounding board for varied interests, which range from farmers and residents to homebuilders and the economic development community. The Advisory Group was brought together five times during the study process. The five meetings included a kickoff meeting, a presentation of the PDR/TDR case studies by American Farmland Trust, a presentation of the draft study, and two final roundtable discussions of the study. Concerns expressed by Advisory Group members are addressed in Chapter VI and written comments are included in Appendix A. The role of the Advisory Group is depicted graphically in Figure 1, which shows the relationships of the parties involved the development of this study. Advisory Group members are as follows:

- C Linda Arlinghaus: Boone County Conservation District
- C Jeff Erpenbeck: Home Builders Association of Northern Kentucky
- C Bruce Ferguson: Kentucky Purchase of Agricultural Conservation Easements (PACE)
- C Danny Fore: Tri-County Economic Development Corporation (TRI-ED)
- C Bernie Kunkel: League of Kentucky Property Owners
- C Sherrie Hempfling: The Boone Conservancy
- C Bob Maurer: Boone County Farm Bureau, Boone County Historic Preservation Review Board
- C Bill Remke: The Boone Conservancy
- C Bob Schwenke: Boone County Planning Commission
- C Gary Toebben: Northern Kentucky Chamber of Commerce
- C John Stanton: Boone County Administration (Ex Officio)

FIGURE 1: BOONE COUNTY PDR/TDR STUDY



ACKNOWLEDGMENTS

This study could not have been completed without the participation of the Advisory Group members listed previously, whose time and input is invaluable and greatly appreciated. The American Farmland Trust prepared case studies of six existing PDR and TDR programs and drafts of the report. Matt Becher, Rural/Open Space Planner for the Boone County Planning Commission authored the majority of the report, which was reviewed and edited by the following individuals: Dave Geohegan, AICP, Director, Planning Services Division and Kevin Costello, AICP, Executive Director, Boone County Planning Commission; and Dale Wilson, Legal Counsel for the Boone County Planning Commission.

CHAPTER II: DEFINITIONS

AGRICULTURAL DISTRICT: Agricultural Districts are enabled in Kentucky by KRS 262.850, the stated purpose of which is “to provide a means by which agricultural land may be protected and enhanced as a viable segment of the state's economy and as an important resource” (KRS 262.850-2). In Kentucky, an Agricultural (Ag) District must contain at least 250 contiguous acres, and each landowner within the district must have at least ten (10) acres of agricultural land. Ag Districts are administered locally by the conservation district board of supervisors and the program is monitored by the Kentucky Soil and Water Commission. In Kentucky, Ag Districts are established through a petition made by the landowners and are reviewed every five years. In Pennsylvania, Agricultural Security Areas (ASAs) function like Kentucky’s Ag Districts.

AGRICULTURAL LAND: Agricultural land in Kentucky is defined in KRS 132.010 as “any tract of land, including all income-producing improvements, of at least ten (10) contiguous acres in area used for the production of livestock, livestock products, poultry, poultry products and/or the growing of tobacco and/or other crops including timber, or where devoted to and meeting the requirements and qualifications for payments pursuant to agriculture programs under an agreement with the state or federal government.”

AGRICULTURAL PROTECTION ZONING (APZ): Although Agricultural Protection Zoning (APZ) ordinances are variable, they typically “protect the agricultural land base by limiting non-farm uses, prohibiting high-density development, requiring houses to be built on small lots and restricting subdivision of land into parcels that are too small to farm” (American Farmland Trust [AFT] 1998b). In Kentucky, APZ is enabled by KRS 100.201 to 100.203.

APPRAISAL: An unbiased and systematic process of estimating the value of a property, whether it be market value, insurable value, investment value, or other defined value of a specific parcel or property.

BARGAIN SALE: “The sale of property or an interest in property for less than fair market value. If property is sold to a qualifying public agency or conservation organization, the difference between fair market value and the agreed upon price can be claimed as a tax deductible charitable gift for income tax purposes” (AFT 1988d).

CLUSTER ZONING: “A form of zoning that allows houses to be built close together in areas where large minimum lot sizes are generally required. By grouping houses on small sections of a large parcel of land, cluster zoning can protect open space” (AFT 1998d). The Boone County Zoning Regulations (Article 31, Section 3111) define a Cluster Subdivision as one having “the same overall gross density of total dwelling units per total acres and the same

permitted uses under the existing zoning district, however, lot dimension and setback requirements are less restrictive. This permits greater unit per acre net densities on portions of the site while containing the same maximum number of dwelling units as would be permitted under a Conventional Subdivision.”

CONSERVATION EASEMENT: Conservation easements are voluntary, legal agreements that allow a landowner to set restrictions on the use of their property. Conservation easements may be sold or donated to qualified nonprofit organizations or government agencies. Permanent conservation easements are usually considered tax deductible gifts. Although conservation easements are typically permanent and remain with a property’s deed, such easements are extremely flexible and can be tailored to meet the needs of individual property owners. For example, the terms of an easement may limit its duration to a certain number of years or stipulate that heirs may build houses on the property. Agricultural conservation easements are enabled in Kentucky by KRS 382.800 to -.850 and defined as “an interest in land, less than fee simple, which represents the right to restrict or prevent the development or improvement of the land for purposes other than agricultural production.”

DEVELOPMENT RIGHTS: Land is traditionally thought of as real property, where ownership extends to all aspects of the land, including the minerals below the ground surface, air above it, and other resources located on the land. Owners of real property also own development rights, which allow development of that land in accordance with local land use regulations. Like mineral rights, development rights can be bought, sold, donated, or otherwise transferred. Restrictions over a property’s development rights are usually recorded in a conservation easement after the value of those development rights is determined.

DEVELOPMENT RIGHTS VALUATION: In general, determining the value of a property’s development rights requires a real estate appraisal, which first determines the fair market value, based on maximum development under current zoning. The value of the property if development is restricted is then determined. The difference between these two figures is the value of the development rights.

DIFFERENTIAL ASSESSMENT/CURRENT USE TAXATION: A form of property tax relief that permits agricultural land to be taxed at a lower assessed value than it would be if assessed at fair market value. Differential assessment of agricultural and horticultural land is enabled by KRS 132.010 to 132.454 and by Article 172a of the Constitution of Kentucky.

ESTATE TAX RELIEF: Enabled in Kentucky by KRS 140.300 to 140.360, this is a form of tax relief that permits agricultural or horticultural land to be assessed at the lower rate for land of this type, rather than at the higher rate used to calculate inheritance tax on land assessed at fair market value.

FEE SIMPLE: Fee simple ownership is the most common type of ownership and “includes all property rights, including the right to develop land” (AFT 1998d).

FEDERAL FARMLAND PROTECTION PROGRAM (FPP): The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) implements this Federal program, which is a voluntary program that helps farmers keep their land in agriculture. The program provides funding to government entities with existing farmland protection programs to purchase conservation easements or other interests. The Pennsylvania PACE program and Town of Dunn PDR both receive Federal FPP monies. Kentucky's PACE program also receives some funding from FPP, however none of this funding has been used to buy conservation easements in Boone County. A PDR program in Boone County, however, would be eligible to apply for these funds.

HORTICULTURAL LAND: In Kentucky, horticultural land is defined in KRS 132.010 as “any tract of land, including all income-producing improvements, of at least five (5) contiguous acres in area commercially used for the cultivation of a garden, orchard, or the raising of fruits or nuts, vegetables, flowers, or ornamental plants.”

LAND EVALUATION AND SITE ASSESSMENT (LESA): A numerical ranking system for determining the quality of agricultural land. Kentucky Revised Statute 246.065 directs the Kentucky State Department of Agriculture to use LESA to identify “lands of statewide agricultural importance.”

LAND TRUST: “A private, nonprofit land conservation organization formed to protect natural resources such as productive farm and forest land, natural areas, historic structures and recreational areas. [Some] land trusts purchase and accept donations of conservation easements” (AFT 1998d). The Boone Conservancy is a land trust operating in Boone County.

PLANNED UNIT DEVELOPMENT (PUD): Planned unit developments consist of residential and commercial uses that occur on “a tract of land that is controlled by one entity and is planned and developed as a whole, either all at once or in programmed stages” (AFT 1998d). Typically, PUDs allow design and density flexibility under current zoning provided that environmental resources and open space are reserved, and that certain design requirements are met.

PURCHASE OF AGRICULTURAL CONSERVATION EASEMENTS - KENTUCKY (KENTUCKY PACE): Kentucky's state Purchase of Development Rights program, established by the Kentucky General Assembly in 1994 and enabled by KRS 262.900 to 262.920. Kentucky's PACE program “authorizes the state [through the PACE Board of Directors] to purchase agricultural conservation easements in order to ensure that lands currently in agricultural use will continue to remain available for agriculture and not be converted to other uses” (Kentucky Department of Agriculture 2001). Kentucky's PACE

program is one of 19 state level PDR programs currently in existence; the details of how these programs operate vary.

PURCHASE OF DEVELOPMENT RIGHTS (PDR): PDR involves paying for the development rights of a property to ensure that the property is not developed. PDR is usually initiated to protect or preserve agricultural land or land containing significant environmental or cultural resources. The details of the agreement between the property owner and qualifying nonprofit organization or government agency are typically recorded in a conservation easement. Kentucky's KRS 67A840 to .850 enables Urban-County Governments to create and administer PDR programs.

RECEIVING AREA: A location or region "designated to accommodate development transferred from [sending areas] through a transfer of development rights program" (AFT 2001). Landowners in receiving areas are usually permitted to build to greater densities than under current zoning and are identified as such within zoning regulations and on the official zoning map.

RIGHT TO FARM LAW: An ordinance created to protect farmers from nuisance lawsuits filed by both public and private entities. Kentucky's right to farm law, KRS 413.072, protects agricultural and silvicultural (timber harvesting) operations from nuisance lawsuits and zoning violations, providing that the operation has been in existence for one (1) year and was not a nuisance at the time it began.

SENDING AREA: A location or region "to be protected through a transfer of development rights program" (AFT 2001). Land owners in sending areas are compensated for selling the development rights of their property to someone who is permitted to build to a higher density in a designated receiving area.

TAKING: "An illegal government appropriation of private property or property rights...regulations that deprive landowners of certain property rights may also result in a taking special circumstances" (AFT 1998d).

TRANSFER OF DEVELOPMENT RIGHTS (TDR): "A program that allows landowners to transfer the right to develop one parcel of land to a different parcel of land...TDR programs establish sending areas where land is to be protected by conservation easements and receiving areas where land may be developed at a higher density than would otherwise be allowed by local zoning. Landowners in sending areas sell development rights to landowners in the receiving area, generally through the private market. When the development rights are sold on a parcel, a conservation easement is recorded" (AFT 2001). In Kentucky, KRS 100.208 allows a city, county, or urban-county government, which is part of a planning unit, to pass an ordinance permitting TDR.

TDR BANK: A fund designed as a component of some TDR programs to buy development rights from landowners in sending areas in the event of temporary lack of market demand. Development rights acquired by a TDR Bank are usually held only until they can be sold. TDR Banks are generally considered a “buyer of last resort.”

CHAPTER III: PURCHASE OF DEVELOPMENT RIGHTS

THEORY, HISTORY, AND PURPOSES OF PDR

Purchase of Development Rights (PDR) programs “compensate property owners for restricting the future use of their land” (AFT 1998e). The first PDR program was developed in Suffolk County, New York in 1974, and by 1980 PDR programs were operating in a number of localities in the northeastern United States (Daniels 1991; Broward County Planning 2000). The goal of most PDR programs is to keep land available for agriculture and to maintain open space or agricultural land in the form of large (and ideally contiguous) tracts. These programs operate on the notion that landowners have numerous rights, including the right to develop, right to lease, sell, borrow against, or mine their property. Landowners also have the right to restrict development of their land. This entire “bundle of property rights” is typically transferred with a property to a buyer when ownership changes hands.

PDR programs separate the development rights from the “bundle” and pay landowners for them. The value of the development rights is usually bought by a government agency or other organization (e.g., a land trust) set up expressly for that purpose; the terms of the agreement are stipulated in a legally binding conservation easement that remains with the property deed (Diehl and Barrett 1988). Participants retain ownership of the property and all of the other property rights and can live on, farm, bequeath, sell, or transfer the property, providing that it remains undeveloped under the terms of the conservation easement. Conservation easements placed on property deeds for the purposes of PDR are usually perpetual, although some programs provide for termination of the terms of the easement after a set number of years (Peters 1990; Broward County Planning 2000). This buy back option has not been utilized yet in any known cases. Most easements restrict the use of property to agriculture, although variations on this theme are common. Conservation easements also typically allow construction of farm buildings and housing for employees and family members.

In most PDR programs, the value of a property’s development rights is established by a real estate appraisal or local easement valuation point system (AFT 1998e; Broward County Planning 2000). The value of the development rights is the difference between the value of the land as restricted and its value if it were developed to the maximum allowed under local zoning. The organization or agency that administers the PDR program pays this amount to the property owner. For example, a farmer owns 100 acres of land that is worth \$10,000 an acre on the open market if it is developed as a residential subdivision. An independent appraiser determines that the property is worth only \$5,000 an acre if it remains undeveloped and continues to be actively farmed. In this case, the development

rights are valued at \$500,000 and the PDR program would pay the farmer this amount. For some, this one-time payout may be an attractive alternative to the outright sale of ownership of the property and its entire “bundle of property rights.”

As of February 2000, 20 states had established state-level PDR programs (AFT 2000b). The most successful state PDR programs are operated in Pennsylvania and Maryland. Pennsylvania has protected over 186,000 acres at a cost of \$377.5 million and Maryland has protected almost as many acres for \$232.8 million. Other state PDR programs that have protected tens of thousands of acres are operated in New Jersey, Vermont, Colorado, Massachusetts, Delaware, and Connecticut. In addition to the state-level programs, at least 34 “stand-alone” PDR programs have been developed by counties, townships, and municipalities in 11 states (AFT 2000a).

It is important to note that the mechanics of PDR and Purchase of Agricultural Conservation Easement (PACE) programs are essentially the same, although PACE programs typically focus primarily on protecting agricultural land while PDR programs explicitly seek to protect a wider range of resources, including historic sites, green space, or wildlife habitat, as well as farmland.

SUMMARIES OF PDR CASE STUDIES

Case studies of two state-level programs and two local programs are summarized in this chapter and presented in their entirety in Appendix B. The attachments which accompany the detailed case studies are included as Appendix C.

PENNSYLVANIA'S PACE PROGRAM

The Pennsylvania state Purchase of Agricultural Conservation Easements (PACE) program is one of the two most successful state level PDR programs in the nation, having protected 186,000 acres since its inception in 1988. The program was created in the late 1980s with the express purpose of protecting the state's farmland, which is vital to the state's economy, heritage, and culture. From the outset, the Pennsylvania PACE program has enjoyed a broad political support because of the recognition of the importance of farming.

The program is administered by a 17-member State Agricultural Land Preservation Board and the 8-member staff of the State Department of Agriculture's Bureau of Land Protection (BLP), which work with county-level Agricultural Land Preservation Boards. Although the program has acquired agricultural conservation easements in 42 counties, the number of dedicated staff at the county level varies from a low of 0.25 in Buckingham Township to a maximum of 4 in Lancaster County. The state BLP staff administer the

program, providing guidance to the counties and reviewing applications. To be eligible for the state PACE program, counties must have state approved programs, and only counties with Agricultural Security Areas (i.e., Ag Districts) are authorized to create county PACE programs. Counties must also work with their planning commissions to identify important agricultural areas that will be under development pressure within a 20-year period.

Pennsylvania's PACE program was initially funded by a \$100 million bond initiative authorized in 1987. An additional \$43 million was appropriated in 1999. The program receives about \$20 million a year from a cigarette tax of 2 cents per pack. An additional \$20 million per year will come from state appropriations over the next 5 years as part of Pennsylvania's Growing Green initiative. Finally, over the life of the program, a total of \$2 million in funds has come from the Federal Farmland Protection Program (FPP).

Both state and county agencies establish eligibility criteria for Pennsylvania's PACE program. The state requires that the farm be located in a certified county (i.e., one that administers the PACE program locally), be within an ASA (i.e., Ag District) of 500 or more acres, be at least 50 acres in size (or 10 acres if crops are unique), contain 50 percent soils in capability classes I through IV (soils with crop potential), and contain at least 50 percent (or 10 acres) of harvested, pasture, or grazing land. Counties may impose additional requirements, such as crop yields or farm income, although these must be approved by the state.

Applications are evaluated using a modified Land Evaluation and Site Assessment (LESA) system, which varies by county. Each county develops its own scoring system, although some criteria are required by the state. The state requires that counties recognize (and reward through points) the following characteristics: (1) tracts that have (or are nearer to or will have access to within 20 years) public sewer and water, (2) tracts with greater road frontage, (3) tracts surrounded by nonagricultural uses, (4) tracts with historic, scenic, and environmental qualities, and (5) tracts that are consistent with county land use planning map of important agricultural lands.

As might be expected with a program involving both state and county governments, the procedures of the Pennsylvania PACE program are somewhat complicated. Funds are allocated according to a complex process that targets counties facing greater development pressure. Consequently, counties (Lancaster, Berks, and Chester counties) located in the southeastern part of the state near Philadelphia are the most active. Applications are completed by landowners and then reviewed by county boards, who visit eligible sites and then rank them. Each county then forwards its ranked list of applications to the state board, who decides which projects to fund. The rank and the cost of the project are the most critical factors considered by county boards. The state share of any single easement purchase was capped at \$10,000/acre; a local match is also required. Payments may be made in a lump sum or in installments over 5 years, although a 30-year installment option

was recently approved. The time frame from initial application to acquisition of the conservation easement averages 12 to 18 months.

The PACE program allows expenditures of funds to acquire permanent easements on agricultural land. Originally, 25-year term easements could be acquired for 10% of the value of a permanent easement, although this option was eliminated in 1994 due to poor landowner interest. Easement valuations are conducted by state certified appraisers, although Lancaster County is proposing to use a points system (like that used in Montgomery County, MD) to speed up the easement acquisition process. The state maintains a standard easement “template,” which permits construction of farm residences and agricultural structures with certain restrictions. Although a contentious issue, some counties also allow subdivision of easement protected properties. Unlike some other PDR programs, Pennsylvania’s PACE easements do allow landowners to sell mineral rights for underground mining, although no sales of such rights have occurred to date.

County boards are the primary monitoring body of easement protected parcels. They are required to inspect farms on an annual basis and create a written report. Although a conservation plan need not be in place at the time of application to the program, such a plan must be established and followed if an easement on a property is purchased. Providing that the state, county, and county board are all in agreement, easements may be ““extinguished” after 25 years if the land is no longer “viable agricultural land.” However, the program requires that “the landowner must pay an amount equal to the value of the easement at the time of resale as determined by appraisal.” To date, no easements have been terminated under this rule, although the program is not yet 25 years old.

If judged by the amount of acres protected by easements, Pennsylvania’s state PACE program is the most successful in the country. This success is a result of several factors, the most important of which is a broad base of political support, which rests in the understanding that agriculture is a key component of the state’s economy. While allocation of funds is somewhat complicated, the program overall is well structured and reasonably streamlined. Counties that make the investment necessary to properly administer the program (by dedicating staff to the program) are rewarded with a high level of support from the state. The PACE program has also benefitted from Pennsylvania’s state land use laws, which make other land protection tools (especially TDR) difficult.

TOWN OF DUNN, WISCONSIN PDR PROGRAM

In 1979, the Town of Dunn (note: Town is an abbreviation of Township), Wisconsin, developed a land use plan that was later recognized as a national model. The Town of Dunn is located in Dane County, next to Madison, Wisconsin, which is one of the state’s fastest growing cities. The 1979 plan recognized that farmland was being lost to development associated with Madison and recommended that the farmland protection should be pursued.

Dunn began using exclusive agricultural zoning in 1979 and created a PDR program in 1996, which was recognized by Renew America as a national model.

Like many PDR (and especially PACE) programs, the Town of Dunn PDR program is designed to conserve productive farmland and support viable farming. However, it also specifically recognizes and seeks to protect open space and environmentally sensitive areas, maintain rural character/quality of life, and protect the Town from encroaching municipalities.

The program is administered by a 7-member Land Trust Commission, staffed by a Land Use Coordinator, who administers the program by working with landowners, hiring appraisers, and applying for grants. The Commission sets program policy and recommends potential easements to the Township Board of Supervisors. The Commission is also responsible for recommending revisions to the Town's Open Space Plan and Program. Applications approved by the Board of Supervisors are voted on by the Town's voters twice a year at "annual" meetings.

The program was initially funded by a voter-approved property tax of 50 cents per \$1000 of valuation, which generates \$175,000 a year in funds. Voters have also approved a \$2.4 million 20 year bond, to be paid off by the existing 50-cent property tax. The program has successfully competed for over \$500,000 in grants from state and county agencies and has received \$650,000 in Federal FPP grants to date. Expenditure of these funds under the program is much more flexible than in other PDR programs. In addition to acquiring conservation easements, program funds may be used to purchase land in fee simple for rural preservation, buy or accept third interests in conservation easements, or make payments to non-profit conservation organizations. The Commission recommends expenditures of funds to the Township Supervisors, although the workload of the Land Use Coordinator has played a key role in dictating the amount of funds spent to date. In short, there is more demand for the program than current staff can manage.

As the Town of Dunn is a relatively small area (34.4 square miles), there are no restrictions established for applications: any landowner may apply. Applications are ranked on a points system that is designed to recognize both farmland and properties that have significant non-agricultural aspects. For example, points are awarded for: high quality farmland, high development pressure, presence of archaeological/scenic/environmental qualities, landowner willingness to take less than market value for easement, and availability of matching funds.

The program procedures are relatively straightforward, involving a series of applications, meetings, and site inspections that work to bring the landowner, staff, and Commission together to negotiate an easement. After submitting a pre-application form, the landowner and Commission meet on site to discuss the program and application. The Commission ranks all applications and begins the process of easement valuation.

Easements are valued by a professional appraiser hired by the town, although the landowner may also hire an appraiser at their own expense as an additional basis for negotiation. Following the appraisal(s) and any negotiation, staff prepares a base line report of the property, which includes a verbal description, maps, and photographs. Applications then go to the Township Supervisors and ultimately to voters. Closing usually occurs about eight months after application, following approval by the Town's voters. Payment is made in a lump sum. To date, no project cap has been established.

The specific terms of easements under the Town of Dunn PDR program vary somewhat by property, although there are some requirements. For example, residences and agricultural structures may be built, as long as they stay within the impervious surface (certain % of total tract) or building envelope (specified area) limits established for the tract in question. While subdivision restrictions vary by property, mining is always prohibited, and public access is not required. Parcels protected by easements are monitored annually by the Land Use Coordinator and Commission. Although the ordinance requires easement violations to be prosecuted in court, this has not been necessary so far.

Easements are considered perpetual, although there is a procedure in place which allows for termination (Broward County Planning 2000). The procedure is a multi-step process that begins with a public hearing, after which the Land Trust Commission provides a recommendation to the Town Board of Supervisors. Termination of the easement must be approved by a majority of Town voters on a referendum, by two thirds of the Town Board of Supervisors, and where appropriate, by a majority of any government agency or non profit that was involved in the easement.

While the Town of Dunn PDR program is only a few years old, it has already secured 12 easements protecting close to 1,500 acres. It has also been recognized as a model program. Together, the jurisdiction's small size (22,000 acres or 34.4 square miles), small population (about 5,500 residents), and high percentage (70%) of agricultural land play a role in the program's success. Rationalizing a PDR program to a larger group of people, where the goals are less easily defined and sense of ownership more difficult to instill, would be much more difficult. The program is well administered and very well publicized locally. The Commission and staff send letters twice a year to large landowners in the Town. The process of involving voters in the easement process makes everyone in the community a part of the program. The continued fund raising efforts of the Town Land Use Coordinator are also key to the program's success. However, the fact that the allocation of funds depends, in part, on staff workload suggests that the program could benefit from additional staff.

LEXINGTON-FAYETTE COUNTY, KENTUCKY, PDR PROGRAM

Lexington-Fayette County, Kentucky, is one of the fastest growing regions in the state, but also has proactively managed growth longer than any county in Kentucky. In 1958, the urban-county government created an Urban Service Boundary, which divided the county's land area into an Urban Service Area around Lexington and a Rural Service Area, which currently comprises about 70 percent of the county. In 1964, the government followed up the growth boundary by instituting a "10 Acre Rule" for lots using septic tanks in the Rural Service Area. Despite these efforts, the county continued to be concerned over the loss of its "rural character" to development outside the Urban Service Area. In 1998, the 10-acre zoning in the Rural Service Area was increased to 40 acres and a temporary moratorium was placed on new subdivisions in the rural area. A Rural Service Area Land Management Plan was developed in 1999. The PDR program, which is just now getting underway, was an outgrowth of that plan.

The purpose of the Lexington-Fayette County PDR program is to protect and enhance both the agricultural and tourism industries, which are seen as interrelated. The program goal is to purchase development rights (through acquisition of conservation easements) on 50,000 of the 128,000 acres of agricultural, rural, and natural lands in the Rural Service Area by the Year 2020.

The program is administered by the 13-member Fayette County Rural Land Management Board. Eleven of these members are appointed by Lexington's Mayor. The other two seats are non-voting members including the County Agricultural Extension Agent and District Conservationist. A Program Manager was hired in March, 2001, to oversee day-to-day operations and a staff assistant position is also planned.

The Lexington-Fayette County PDR program is well-funded. A \$25 million bond to be paid off by \$2 million annually from county general funds was approved in 2000. The program has also received a \$15 million grant from the Kentucky Agricultural Development Board from Kentucky Tobacco Settlement monies. The PDR ordinance (see Attachment P, Appendix C) authorizes the government to continue funding through one of several tax levies, including a property tax, payroll tax, and/or hotel room tax; none of these taxes has been initiated so far.

The program requires the following for applications: (1) fee simple ownership, (2) land must be located in eligible zones, (3) non-conforming uses are excluded, (4) at least 20 acres and at least 1 development right (defined as the number of lots that could be created under zoning), and (5) landowners must agree to follow a conservation plan. A LESA points system is used to rank applications. Positive points are awarded for the following characteristics: large parcel size, length of public road frontage (longer scores higher), proximity to land already under easement, soil quality, farm activity, agricultural improvements, environmentally sensitive areas, designated rural greenway, designated

focus area, natural protection area, linkages (parks, historic sites, etc.), historic/cultural resources, scenic resources, and elimination of undeveloped nonconforming tracts. Points are subtracted from the score if the parcel is near the Urban Service Boundary and located within certain specified "sewerability categories."

The procedures of the program are fairly typical. Applications are accepted biannually. January 31 was the deadline for the first round of applications for the year 2001; 37 applications representing nearly 6700 acres were submitted. Following receipt, applications are reviewed for eligibility by Board members and scored by staff. Staff then submits a written report to the board, who may also hear appeals from landowners unhappy with the ranking. The board decides who to begin negotiating with based on a majority vote. An appraisal is then conducted by a certified real estate appraiser. Additional points may be awarded based on the applicant's willingness to accept less than the full appraised value for an easement on their property. At this time, the Rural Land Management Board and staff are working on an easement template. Annual monitoring will be conducted by the Rural Land Staff with violations enforced in court.

Like most PDR programs, the Lexington-Fayette County program does stipulate a process for easement termination. Owners of easement protected property located within the Urban Service Area may request release from the terms of the easement after 15 years if it can be demonstrated that farming is no longer viable and that it has become impossible to fulfill any of the conservation purposes of the easement. Landowners in the Rural Service Area may make such a request after 25 years. To be released from an easement, a landowner must: (1) donate a comparable conservation easement on another parcel, (2) donate 20% of the usable acreage of the subject property for county park, (3) pay fees to cover easement administration, and (4) pay the difference in value between the newly donated easement and the one being terminated.

As the program is just getting underway, it is too early to realistically evaluate its performance. However, it is worth noting some of the issues which surrounded its creation. Critics of the program claimed that the PDR program would (1) give tax breaks to wealthy horse farmers and (2) deny public access to land protected with public dollars. There was also appreciable criticism of the concept of permanent easements, which resulted in the insertion of an easement termination clause into the ordinance. In addition, the program was not staffed throughout the initial education and application taking processes. Indeed, the Program Manager was not hired until several days after the date the Board had targeted to announce the rankings of the first application. In spite of these shortfalls, the Lexington-Fayette County PDR program was organized well enough and early enough to be in a position to receive \$15 million in Kentucky Tobacco Settlement funds.

KENTUCKY'S PACE PROGRAM

The State of Kentucky's Purchase of Agricultural Conservation Easements (PACE) program was established by the Kentucky General Assembly in 1994 and enabled by KRS 262.900 to 262.920 (see Appendix D). Kentucky's PACE program "authorizes the state [through the PACE Board of Directors] to purchase agricultural conservation easements in order to ensure that lands currently in agricultural use will continue to remain available for agriculture and not be converted to other uses" (Kentucky Department of Agriculture [KDE] 2001). Kentucky PACE is designed specifically to protect agricultural land, unlike most PDR programs, which often target farmland as well as other sensitive lands.

Kentucky PACE is administered by the PACE Corporation, a public agency within the Kentucky Department of Agriculture (KDA) which is overseen by an 11-member board of directors, including four public officials. To date, the program has not been staffed full time. Rather, staff in the KDA Office of Environmental Outreach have assisted with the program as necessary. While plans exist to create a four-person staff in a Division of Farmland Preservation, the division has not yet been funded (Burnett 2001).

The PACE Board is authorized to expend funds to pay the costs of conservation easement acquisition and program administration, although easement donations are also accepted. To date, Kentucky PACE has purchased 14 conservation easements totaling 3,388 acres for nearly \$2.3 million at an average of \$677/acre (KDE 2001). The program holds easements over a total of 4,408 acres, including 11,020 acres in 6 donated easements. Since 1994, 123 applications from 37 Kentucky counties and including over 26,000 acres, have been received by the PACE Corporation. Of these, 103 applications are still pending, including 2 from Boone County. So far, the program has been funded by state appropriations and matching funds from the Federal Farmland Protection Program, although \$10 million in Kentucky Tobacco Settlement dollars are anticipated (Burnett 2001).

To be eligible to apply to the Kentucky PACE program, a property must be held in fee simple ownership and must be in use, or available for use, for agricultural production. Applications are ranked by a points system which awards points according to 11 categories: soil types, size of easement parcel, land in agricultural production within 1 mile, perimeter of parcel borders in non-urban use, parcel distance from urban built-up areas, location in or near an Ag District, level of on-farm investment, percentage of tract farmed for 5 of preceding 10 years, parcel covered by conservation plan or similar document, owner's willingness to accept less than market value, and local conservation district review and recommendation (KDE 2001). The PACE Corporation is presently considering adding three additional categories, including: contiguous block or applications or proximity to other PACE tracts, parcels located in state designated agricultural protection areas, and parcels located in tobacco dependent counties.

Although there is no project cap or maximum dollar amount that may be spent on a single easement, the PACE Board maximizes funding by negotiating easement prices on a case by case basis. The Board typically pursues only the top ranked applications. Prior to negotiating with a landowner, two appraisals are conducted by independent appraisers. The PACE Board then negotiates a price with the landowner, who is strongly urged to donate a portion of the development right value to offset capital gains taxes. Payment is made in a lump sum. So far, the maximum time period from application date to final easement acquisition has been two years. The slow property surveying process has been the largest impediment to timely completion of easement negotiation in the Kentucky PACE program (Burnett 2001).

The terms of easements held by Kentucky PACE stipulate that the property be used for agricultural purposes. While a conservation plan is required, construction of new buildings (including dwellings), subdivision, paving, logging, and mining are permitted only with the written permission of the PACE Board. Easement protected lands also receive some protection from eminent domain: landfills, sewer treatment plants, and other public facilities “not compatible with or complimentary to agricultural production” are prohibited. The PACE Board is supposed to monitor easements yearly, although insufficient staffing has prevented this to date.

The Kentucky PACE program does include an easement termination clause, providing that “conditions on or surrounding the land ... have changed so much that agriculture is no longer viable and it has become impossible to fulfill any of the easement's conservation purposes” (KRS 262.918). To initiate the easement termination process, a landowner must file suit in Franklin County Circuit Court, naming the PACE Corporation as the defendant. If the court finds that a portion of the land under easement can no longer meet the terms of that easement, the landowner must: (1) pay for a survey of the land where the easement will be terminated, (2) repay the then fair market value of the easement to the PACE Corporation as determined by (a) an appraisal or (b) the full cost of acquiring and monitoring the easement plus interest determined by the court.

The Kentucky PACE program is a small, state-level PDR program designed to protect farming on the best farmland in the state. To date, it has been poorly staffed and minimally funded, although the program has acquired easements covering over 4,400 acres of Kentucky farmland.

BENEFITS AND DRAWBACKS OF PDR

From the standpoint of protecting land, the advantages of PDR's are numerous. They are generally a permanent form of land protection, although some programs do have termination or “buy back” clauses. The voluntary nature of PDR programs makes them somewhat easier to sell to the public than some other land protection techniques (such as

restrictive zoning or urban growth boundaries), which may be perceived as intrusive (Nelson 1992). Further, PDR programs give property owners a cash asset while allowing them to continue to use the land (AFT 1998e). Most importantly, voters across the country have strongly supported PDR and similar open space conservation measures. In November 2000, voters approved \$746 million in funding for state and local ranch and farmland protection efforts (Trust for Public Land 2001).

Along with the benefits of PDRs come several disadvantages, the most notable of which is expense (Peters 1990; Daniels 1991; AFT 1998e; Kelsey and Lembeck 1999). Based on AFT's 1997 figures, it costs an average of \$1,800 an acre to preserve land through PDR. The cost of easements in Pennsylvania's PACE program has ranged from about \$500 to upwards of \$7,300 per acre and the \$10,000 per acre cap was recently eliminated. The Town of Dunn has spent close to \$1,500 per acre to protect farmland. By comparison, the average cost per acre preserved by Kentucky PACE is \$677, a figure that would not come close to equaling the development value of most of Boone County's agricultural land. The expense issue has made it difficult for some PDR programs to assemble the "critical mass" of farmland necessary to keep development at bay (Daniels 1991). The term critical mass refers to the number of farms necessary to keep "farm input suppliers, shippers, processors, and other farm-related services" in business (Kelsey and Lembeck 1999). Financing a PDR program with public funds may also be politically unpopular, although voters in the Town of Dunn recognized the value of land conservation and voted to increase property taxes to pay for it. The process of transferring the conservation easement has also been criticized for being less than expedient (Daniels 1991; AFT 1998e). Also, the voluntary nature of the strategy may work against it by making it difficult to protect some critical acreage (AFT 1998e).

KEY ISSUES TO CONSIDER WITH PDR

The above sections of this chapter outline "the basics" of PDR and provide detailed case studies of several programs. Key issues to address when setting up and operating a PDR program are addressed below.

GROUNDWORK AND PLANNING

To be successful, a PDR program requires extensive public education and outreach, especially within the farming community, whose land is most likely to be the subject of protection efforts (Broward County Planning 2000). Programs that make continued outreach a priority are more likely to succeed. For example, the Town of Dunn's practice of sending letters to large landholders reinforces the existence of the PDR program and reminds landowners to consider the Town's program as a realistic option. The goals of the PDR

program must reflect the community's desires and public outreach needs to be a component of all stages of program development, from initiation to funding to application acceptance.

PROGRAM ADMINISTRATION

Adequate staffing and a good board of appointees are critical to the viability of a PDR program. The Pennsylvania PACE program is administered by a 17-member board of appointees that has an 8-member staff at its disposal. The counties in Pennsylvania that have received the greatest level of support from the state also support the largest number of staff. The Kentucky PACE program is administered by an 11-member board and receives staff support from existing Department of Agriculture staff. These staff people work directly with applicants and receive some support at the local level from agricultural conservation districts. There is no dedicated staff at either the state or county level for the Kentucky PACE program. Although there are other mitigating factors (e.g., funding, program tenure, political support for program), Kentucky's PACE program has been nowhere near as successful as Pennsylvania's.

Most local PDR programs are also administered by an appointed board and paid staff. Depending on the size of the community, a board with 7 to 11 voting members is usually sufficient. At least two full time staff are required to realistically operate a PDR program. The case studies of the Town of Dunn and Lexington-Fayette County suggest that one person probably cannot handle the workload of a county or township level PDR program.

Other keys to success for PDR programs are flexibility, simplicity, and as much one-on-one contact as possible. The Town of Dunn program exemplifies this approach by encouraging all landowners to apply and by using a streamlined approach to the evaluation-appraisal-negotiation-closure process, which averages only 8 months. The board and staff work closely with the landowner throughout the application process, thereby building trust with the landowner and creating program legitimacy in the eyes of the community.

FUNDING

Together with public support, funding is the most important key to the success of a PDR program (Kelsey and Lembeck 1999; Broward County Planning 2000). Most programs are funded by general obligation bonds, although money has also come from lottery appropriations, property taxes, cellular phone taxes, capital improvement funds, general funds, grants, and private gifts. Pennsylvania's PACE program receives a substantial amount of annual funding from a cigarette tax and the Lexington-Fayette County PDR program was awarded \$15 million in Kentucky Tobacco Settlement funds. While such "sin taxes" are easier to sell politically than property or sales taxes, they also are not common. The Federal FPP program operated through the USDA Natural Resources Conservation

Service has been a source of funding for three of the four PDR case studies, although it is a significant source only for the relatively small Town of Dunn program. To maximize funding opportunities, a county level PDR program should employ a staff with experience and success in public financing, or receive support from a county department with qualified personnel. The program should also allow funding to come from as wide an array of sources as possible, including private gifts. The board must have the discretion to use funds to acquire an interest in easements (or fee simple ownership) in a variety of ways, such as funding a land trust, entering into three party agreements, or buying land at auction.

WHAT TO PROTECT

Deciding what to protect is fundamental and is an essential component of the groundwork underlying a PDR program. A focused and strategic approach to this issue is cost effective and will better meet program goals by avoiding use of funds to protect land that does not meet the community's needs. It has been argued that loss of farmland threatens food productivity as well as the economy and that PDR is used to address the loss of farmland. It has also been argued that this is not supported by statistics (Riggle and Tolman 1999). This argument may be appropriate if applied only to a view of farmland across the nation. However, local conditions and, more importantly, local sentiments vary greatly. Therefore, the decision to create a PDR program to protect farmland, wetlands, archaeological sites, or the like should be made by the community. While there are no data at present to indicate which of the more than 50 existing PDR programs make agricultural protection their primary goal, it has been suggested that only a portion (less than 1 in 5) are structured to protect open space (Broward County Planning 2000).

One reason the Pennsylvania PACE program has protected so much acreage is because it relies on the popular notion that agriculture is essential to the state. While the Pennsylvania PACE program has protected land, it is not yet clear whether this will accomplish the ultimate goal of protecting farming (Kelsey and Lembeck 1999). Nonetheless, support (and hence funding) for the program remains strong because the underlying observation is compelling. By comparison, the Town of Dunn recognizes the importance of farming to the community but also emphasizes that open space, and natural and cultural resources are just as essential. While planners, academics, and consultants can identify what ought to be targeted by a PDR program, involving the community in the process lends legitimacy and will benefit the program in the long run.

Most programs use a modified version of the USDA-NRCS Land Evaluation and Site Assessment (LESA) points system to rank applications. While the two state PACE programs and the Lexington-Fayette County program give greater weight to agricultural land, the Town of Dunn system gives appreciable recognition to properties with significant cultural and natural features. Two programs (Pennsylvania PACE and Town of Dunn) award points to parcels facing development pressure, while both Kentucky programs subtract

points in such instances. Deciding whether to reward or penalize applications for land adjacent to the urban fringe must be a part of the community assessment. Regardless, the LESA system is flexible enough to reflect the goals of any PDR program.

DETERMINING EASEMENT VALUES

All of the programs studied here employ a certified appraiser to make easement valuations. The Montgomery County, Maryland, PDR program uses a points system to value easements and Lancaster County, Pennsylvania is considering a points system to help rank applications for the Pennsylvania PACE program. Both approaches have benefits and drawbacks. While the points system may impartially evaluate and rank one tract against another, it may be perceived by the public as a government tool unless it is constructed from criteria specified by the public. Although quicker than a traditional appraisal, a points system also adds another layer of complexity to a PDR program as well as an additional alien concept to a program few people will be familiar with. By comparison, the process of hiring a certified real estate appraiser to value a property is familiar and appraisers are usually considered to be impartial. However, some appraisers may have difficulty determining the development value of a property because there will be few comparable sales on which to base an appraisal. Appraisals can also take more time than the points system. Nonetheless, for a fledgling PDR program, valuation by certified appraiser is probably a more realistic approach than a points system. The need for a fair and efficient easement valuation process was demonstrated by the failure of Palm Beach County's PACE program, which was created in 1996 to augment an existing TDR program (Broward County Planning 2000). The program received only three applications and was ultimately discontinued because landowners and the county PACE board could not agree on appraisal values.

PDR AND LAND USE PLANNING

One reason that Pennsylvania's PACE program is so successful is because PDR is one of the few feasible land conservation techniques that works under the state's restrictive land use planning. While agricultural zoning and preferential tax assessment are widely used in the state, neither has the potential to protect farmland in perpetuity. As will be seen in the next chapter, the effectiveness of TDR programs is a function of their relationship to zoning. To a certain extent, the same may also be true of PDR. Indeed, Randall Arendt (1997a) observes that the effectiveness of PDR is undermined in areas where zoning allows suburban development densities. This makes selling agricultural land for development much more lucrative than farming and also makes easement acquisitions expensive. Such a scenario is typical along the urban/rural fringe, where land values are likely to be high. The state level PDR program in Massachusetts succeeded in protecting only 3 percent of the state's farmland, despite spending \$45 million to purchase conservation easements in the late 1970s and early 1980s (Arendt 1997a). By comparison, PDR in Carroll County,

Maryland, was successful because 20 acre zoning in agricultural zones was introduced in the late 1970s.

Downzoning of agricultural property encourages landowners to seek alternatives to development, and a PDR program may be the best available option. Although downzoning for the purposes of land conservation has been upheld by state courts (see the New Jersey Pinelands study in Chapter IV), it is not popular with landowners and there are other legal implications.

EASEMENT RESTRICTIONS AND MONITORING

Easements typically restrict the number of structures that may be built on a property, the extent to which the property can be subdivided, and the range of activities which may take place on it. A community assessment of conservation priorities should guide the degree of restriction imposed by a program's easements. A flexible approach to the drafting of easements is also important. While it may be prudent to restrict all mining, it may be more beneficial to protect a parcel and allow underground mining rather than not protect the parcel at all. Likewise, preventing a farmer from reserving a house lot for an heir may turn the farmer away from the program. An easement designed to protect farmland should not be too restrictive about the types of farming operations that are allowed, since the goal of a land protection program is to stabilize the land base, not to dictate the type of farming. Even though an easement template is a necessary component of any efficient PDR program, easements should be adaptable to unique situations or properties.

Each PDR case study program has a method for monitoring and enforcing the terms of their conservation easements, although Lexington-Fayette County is processing applications and does not yet hold any easements. In general, the American Farmland Trust recommends that easements be monitored at least annually because programs that monitor easements less frequently have difficulty correcting easement violations (Schwartz 2001). Monitoring is typically a labor-intensive process that may comprise a significant portion of staff duties in a large PDR program. However, county level PDR programs, such as the one maintained by Montgomery County, Maryland, have found that the terms of easements are often sufficiently monitored by neighbors and other owners of easement-restricted property. Typically, violations of the terms of conservation easements do not increase until properties fall into 2nd and 3rd generation owners (Burnett 2001).

BUY BACK OR TERMINATION OPTIONS

One of the most important advantages of PDR is its permanence, which is why termination or "buy back" clauses are discouraged by many conservation-minded groups.

However, inserting a termination clause may be a good way to satisfy the concerns of those who feel that PDR protects the present at the expense of the future. Most PDR programs that allow easement termination, including the Town of Dunn, require some sort of vote or approval by the PDR board and/or other interested agencies. The Lexington-Fayette County PDR program requires landowners requesting an easement termination to meet several conditions, including donating another conservation easement of equal acreage, pay for the tax breaks incurred from selling the easement, and setting aside 20 percent of the subject property for a public park. Such an approach may be viewed as an option by landowners who have a strong desire to get out of a conservation easement. However, the penalties for terminating the easement are severe enough to prevent landowners (or their heirs) from profiting by selling development rights initially and fee simple ownership at a later date.

COURT CASES RELATING TO CONSERVATION EASEMENTS USED FOR PDR

As of early 2001, there had been no court cases in Kentucky relating to PDR or conservation easements. However, several court cases relating to conservation easements used for PACE or PDR have played out in other states around the nation. Three of them are discussed here to clarify some of the legal issues surrounding PDR.

Cook v. Pennsylvania Department of Agriculture (1994)

In *Cook v. Pennsylvania Department of Agriculture*, the owners of a 50-acre farm in Adams County, Pennsylvania, challenged a decision by the Pennsylvania Agricultural Land Preservation Board (ALPB, the Pennsylvania PACE board), which prohibited subdivision of a portion of their farm (Martin 1997b). The landowners had sold an agricultural conservation easement for the farm under the Pennsylvania PACE program and subsequently wanted to subdivide a 12-acre portion of the property. They requested the easement be removed from the 12 acres and the ALPB denied the request based on the belief that subdividing it would harm the economic viability of the remaining land. Under Pennsylvania enabling legislation, the ALPB could deny the landowners request if they could demonstrate that subdividing the property would harm its economic viability. However, on appeal to the Commonwealth Court of Pennsylvania, it became apparent that the ALPB made no record of the landowner's presentation at a required public hearing. As such, the court had no basis to review the case and ordered the ALPB to rehear the landowner's request. In fact, since the easement was jointly held by the ALPB and Clark County, both jurisdictions were required to hold public meetings to weigh the "economic viability" issue for the 12-acre parcel in question.

Lenzi v. Agricultural Land Preservation Board (1992)

Another Pennsylvania PACE case, *Lenzi v. Agricultural Land Preservation Board*, involved opposition by Richard Lenzi to the sale of a conservation easement on a neighboring 130-acre farm in Berks County (Martin 1997c). Lenzi brought suit against the

ALPB on the basis that they did not provide him the opportunity to be heard regarding the sale. The state's authority for buying conservation easements resides in Pennsylvania's Agricultural Area Security (Ag Area) Law, which governs the creation of the state's version of Ag Districts. A landowner who wants to sell a conservation easement must first apply to be a part of an Ag Area, a process which involves an inclusive public hearing. Although the 130-farm was located in an existing Ag Area, the Commonwealth Court of Pennsylvania ruled that neighboring landowners should also have the opportunity to be heard if the sale of a conservation easement within an existing Ag Area is proposed. The court ordered the ALPB to hold a public hearing.

Appeal of John MacEachran (1981)

Appeal of John MacEachran involved the evaluation and rejection of a property under New Hampshire's PACE program (Martin 1997a). The landowner, MacEachran, applied to the New Hampshire Agricultural Lands Preservation Committee (ALPC) to purchase development rights on 5.5 acres of his 6.5-acre parcel in Concord, New Hampshire. The parcel was located in a low density residential area with "significant development pressure." The ALPC uses a points system to evaluate potential properties for easement acquisitions and MacEachran:

...claimed his land scored higher on the point system than some land which was accepted. The ALPC rejected MacEachran's application for several reasons. First, MacEachran's land scored lower than the land that was accepted due to poor soil quality. Second, preservation of the 5.5 acres in a low density residential area with significant developmental pressure was not in keeping with the long-range plan for growth in Concord, New Hampshire. The area was already significantly developed and purchasing MacEachran's rights would create an island of farming. Lastly, The value of the developmental rights on the 5.5 acres was extremely high. The average price per acre on the land ALPC protected was \$3,369.75, but the price per acre on MacEachran's land was \$43,636. The land was still unaffordable even after the plaintiff agreed to accept only 60 percent of the value of the land. The ALPC felt it could purchase the rights on more land of equal or better quality in other areas for the same money (Martin 1997).

Upon appeal, both the district court and the Supreme Court of New Hampshire found in favor of the ALPC. The Supreme Court stated that New Hampshire's PACE program "was enacted for the general welfare and MacEachran had no right to have the development rights to his land purchased by the state. The ALPC was correct to reject 5.5 acres because it was poor in quality, in a bad location and valued at an extremely high price" (Martin 1997).

These three court cases are among the most important in terms of the legality of conservation easements used for PDR. Both the *Cook* and *Lensi* cases demonstrated that conservation easements were acceptable, as long as the process by which they were used

was legal under the appropriate state law. More importantly, these cases suggest that due process and public notice should be tenets of any PDR program. The *MacEachran* case showed that a PDR program is not obligated to purchase an agricultural conservation easement that does not meet the program's stated goals. This case suggests that the purpose of a PDR program should be grounded in the goals and objectives of local planning documents (especially the comprehensive plan) and that program purposes should be clearly stated and defensible.

CHAPTER IV: TRANSFER OF DEVELOPMENT RIGHTS

THEORY, HISTORY, AND PURPOSES OF TDR

Transfer of Development Rights was initially developed to protect historic properties. The concept was popularized after a 1978 U.S. Supreme Court decision in *Penn Central Transportation Company v. New York City* (Murtagh 1987). That case focused on the issue of whether New York City's 1968 TDR ordinance, the first ordinance of its kind in the nation, could prevent the owner of an historic landmark (Grand Central Station) from putting their property to its "highest and best use" (Pruetz 1999). The court said that Penn Central was not deprived of this right because the city ordinance permitted them to transfer the development rights for the station to one of their other nearby properties. Since that time, 50 counties, towns, and municipalities in the U.S. have developed TDR programs in order to protect farm and ranchland (AFT 2001). By early 2000, a total of 67,707 acres had been protected across the United States through TDR; 60 percent (40,583) of this total was in Montgomery County, Maryland (AFT 2001).

Like PDR, TDR operates on the fact that property is owned as a "bundle of rights" and that the right to develop can be severed from the property and transferred (Mittra 1996; Michigan Agricultural Experiment Station [MAES] 1999). Unlike PDRs, most TDRs function as agreements between private land owners and developers. They are best described as follows:

TDR programs allow landowners to transfer the right to develop one parcel of land to a different parcel of land. Generally, TDR programs are established by sections of local zoning ordinances. In the context of farmland protection, TDR is used to shift development from agricultural areas to designated growth zones closer to municipal services. The parcel of land where the rights originate is called the "sending" parcel. When the rights are transferred from a sending parcel, the land is restricted with a permanent conservation easement. The parcel of land to which the rights are transferred is called the "receiving" parcel. Buying these rights generally allows the owner of the receiving parcel to build at a higher density than ordinarily permitted by the base zoning (AFT 2001).

While TDR programs are typically set up and administered by government agencies, the development rights of a property are sold and bought on the open market. As a result, the value of development rights is partially a function of the real estate market (MAES 1999). The key role of government in a TDR program is to define sending and receiving areas and oversee the transfer of development rights. The TDR agency also holds and monitors the conservation easement drafted to protect the sending area parcel. Some

programs have established a TDR Bank, which may purchase development rights from a seller and hold them until they can be sold to an interested buyer. TDR banks have been used to initiate a program and generate a local market for transferrable development rights. However, the TDR bank is generally viewed as the “buyer of last resort.”

SUMMARIES OF TDR CASE STUDIES

Case studies of three existing TDR programs are summarized in this chapter and presented in their entirety in Appendix B. The attachments which accompany the detailed case studies are included as Appendix C.

MONTGOMERY COUNTY, MARYLAND

Montgomery County, Maryland, has a lengthy history of planning for land protection. In 1969, the Montgomery County Council adopted *On Wedges and Corridors*, a plan which recommended protecting agricultural land and open space. The county adopted 5-acre rural zoning in 1973, although this move had the unexpected result of accelerating the loss of farmland. A task force formed to look at the issue concluded that PDR was too expensive an option and that using restrictive zoning might violate landowner property rights. The task force recommended that the county implement Agricultural Protection Zoning and develop a TDR program to reduce residential density in non-agricultural “sending areas.” In 1980, a functional master plan called *Preservation of Agricultural and Rural Open Space* was adopted. This plan designated an 89,0000-acre Agricultural Reserve (one third of county), which was rezoned to 25-acre zoning, and which became the Sending Area for the TDR program. The 25 acre threshold was established by a study which showed it to be the minimum that could supply a cash crop for a family. In the early 1980s, a lawsuit filed by a group of Agricultural Reserve property owners unhappy with the downzoning was defeated in circuit court.

The TDR program in Montgomery County is administered by two government agencies. The 2-person Rural Team of the Maryland-National Capital Park and Planning Commission (M-NCPPC), which serves both Montgomery and Prince George’s County, develops master plans for each of the 21 planning areas in Montgomery County, conducts site plan review, monitors receiving areas, and enforces zoning. The Agricultural Services Division (2 full time staff, 1 administrative person) within the Montgomery County Office of Economic Development administers the county’s PDR program, but monitors the effectiveness of the TDR program and does considerable outreach to farmers in the Agricultural Reserve. This ongoing education is an outgrowth the TDR program’s education goals, which began with a series of public meetings in the early 1980s. The planning board also published and periodically updates *Plowing New Ground*, a question/answer format booklet that explains

the TDR program. The Rural Team provides public assistance, and the county's Agricultural Services Division staff does outreach.

The TDR transfer process in Montgomery County is thoroughly integrated with subdivision and site plan review and the process takes no longer than a standard site plan review. The entire Agricultural Reserve is designated as the Rural Density Transfer Zone, or sending area. Initially, receiving areas were designated in the master plans of 15 of the 21 county planning areas, although the Maryland Court of Appeals ruled in 1987 that receiving areas had to be shown on the county zoning map. The receiving areas, which are now incorporated in the county zoning, are all residential zones.

In the Montgomery County TDR program, one development right is calculated for every five acres of the parcel from which rights are being transferred. Someone owning 100 acres in the Rural Density Transfer Zone would be able to sell 20 TDRs. The buyer of those 20 TDRs would then be able to build one extra house per TDR in an eligible receiving area. Assuming that zoning in the receiving area allowed 4 Dwelling Units per Acre (du/acre), 40 du could be constructed on a 10-acre tract. With 20 TDRs to use, a developer could theoretically build up to 60 du on that same 10-acre tract. However, there is no guarantee of full density with TDRs; the site plan and number of units is negotiated as part of the site plan review process. Developers using TDRs in Montgomery County typically build to about 80 percent of allowable density due to site restrictions.

As with other TDR programs, TDRs in Montgomery County are set by the supply and demand in the private market. The value of a single TDR peaked at \$11,000/acre in 1996. It is worth noting that TDR values doubled within three years after the county implemented a PDR program in 1988, although prices have since moderated.

The Montgomery County TDR program is one of only a few programs that uses a formula to determine easement values rather than a real estate appraiser (see Attachment Q). The formula takes into account factors such as size of the farm, soil quality, presence of a farm conservation plan, and length of road frontage to determine the Maximum Easement Value. This figure is divided by 5 to determine the maximum value of each TDR. The landowner and potential buyer use this figure to negotiate a price for the TDRs.

In 1982, Montgomery County set up the County Development Rights Fund, a TDR "bank" as a "buyer of last resort" to ensure that landowners in sending areas would be able to sell their TDRs or use them TDRs as collateral on bank loans. A Development Rights Fund Board was created to buy TDRs and to guarantee loans made by private lending institutions. Before becoming eligible to submit an application, landowners were required to try to sell their TDRs in the open market or to secure a loan using the TDRs as collateral. Because there was sufficient market demand for TDRs in Montgomery County, the "bank" fund was never used and was eliminated in 1990.

The Montgomery County TDR program is often classed as mandatory, although this term is somewhat misleading. It is considered mandatory because landowners in the Agricultural Reserve (the sending area) must sell their TDRs to recoup the property equity lost as a result of the 1980 change to 25-acre zoning in the Agricultural Reserve. Further incentive to sell TDRs results from the fact that Capital Improvements Planning in Montgomery County does not extend public services to the Agricultural Reserve. Finally, with the exception of affordable housing, TDR is the only way for builders to increase density in receiving areas.

Easements developed under the TDR program follow a standard easement “template.” Residential development on sending parcels is prohibited once an easement is in place. However, landowners are encouraged to retain at least one of their development rights in the event that they wish to build a house on the site in the future. While easements may be terminated after 25 years under Montgomery County’s PDR program, there is no such provision in the TDR program. While landowners are not required to follow a conservation plan, easement protected property is monitored by M-NCPPC as part of zoning administration. In addition, TDR records are reviewed as a precursor to issuance of building permits.

There are several reasons why the Montgomery County TDR program has protected more property through easements than any other program in the country. Proactive planning is the first key to the program’s success. The program was prefaced by a series of actions, including a study, task force, master plan, and significant zone change. The program is also well-designed, adequately staffed, and integrated with the existing site plan review process. Staff of two organizations are involved in the program at some level and there is a significant investment in public education and coordination with landowners. Strict development restrictions in the sending area urge property owners to sell development rights, and rapid growth and desire for greater density in receiving areas has created a market demand for TDRs. The market demand for TDRs was augmented slightly in the early 1990s after the county implemented a PDR program.

While the program is widely considered to be successful, several criticisms and issues have surfaced. The program has been criticized on the basis that it benefitted from the downzoning in the Agricultural Reserve, which encourages landowners to sell TDRs to recoup the land equity they had under the former zoning. The program could also be accused of creating a *de facto* Urban Growth Boundary around the Agricultural Reserve, where public services are tightly regulated and zoning has been reduced. In addition, the program has been unable to fully realize the goal of farmland conservation in some instances, partly because wealthy individuals buy the “Fifth TDR” from a 25-acre parcel and develop the property into a 25-acre country estate. Shifting residential preferences have undermined the market for TDRs to some degree as well. Homebuilders are finding that the density bonus possible with TDRs is not so attractive because they can make more money

by building larger homes on large lots rather than by building a greater number of smaller units on small lots.

THURSTON COUNTY, WASHINGTON

The TDR program in Thurston County, Washington, was launched in 1995 and is relatively young by comparison with the Montgomery County, Maryland program. However, while Thurston County's 1976 Comprehensive Plan recommended a PDR program and/or TDR program, the TDR program was not developed until after: (1) an Urban Growth Boundary was established around Olympia in the early 1980s and (2) Washington Growth Management Act was adopted in 1990. In 1989, Thurston County began the process of protecting its most sensitive agricultural land by establishing 40-acre zoning in the Nisqually Valley. Two years later, the county used a one-time PDR program to buy 940 of the 1,000 best agricultural acres in the valley. The \$2.3 million used to finance this short-lived PDR program was funded by an optional 6.5-mil Conservation Futures Levy.

While what was recognized as the most important agricultural land was protected by the PDR program, the county did not feel that the public would support PDR for the other 12,000 acres of Thurston County's best farmland. Planning for a TDR program began in 1993 with the development of a feasibility study to see if TDR was realistic. The study warned that a "sustained commitment" to TDR would be needed to realize success. During the process of studying the issue, it became apparent that the county's farmers were skeptical of TDR and resentful about zoning, which had been reduced to 20-acres in most agricultural districts (40 acres in the Nisqually Valley). Despite this, the farmer-backed Agricultural Advisory Committee encouraged the county to pursue a TDR program.

Thurston County's TDR program was launched in 1995 with the purpose of permanently protecting land zoned "long term agricultural." However, the program was not actively promoted until 2000 and has not yet resulted in the transfer of any development rights. About 11,000 acres in Thurston County fall under this designation, which was defined by the 1990 Growth Management Act.

The TDR program is administered by one staff member within the county planning agency and by staff in each of the three largest cities (Olympia, Lacey, and Tumwater). Of note, none of the staff are dedicated full-time to the TDR program; each has additional planning responsibilities within their respective agencies. Public education has suffered as a result. While an information kit was mailed to sending area landowners as part of initial public outreach campaign in 1995, the program went without any promotion for the next five years.

Sending areas designated by the program are contiguous with the Long-Term Agricultural Zones, which were downzoned to 20-acres in 1989. One development right is

calculated per every five acres so that a 100-acre farm contains 20 TDRs. The TDR ordinance allows TDRs to be bought/sold on the open market, although they may also be banked, dissolved (i.e., retired and never used anywhere else), or used to increase or decrease density in receiving areas. A list of landowners interested in selling their development rights is maintained by the county. While the \$2,800/acre price paid by the county's PDR program suggests how much development rights may sell for on the open market, no transactions have taken place as of yet.

Receiving areas in the Thurston County TDR are established in two residential zones in the county and in residential (and mixed use and business zones in Lacey) zones in the incorporated cities of Olympia, Tumwater, and Lacey. The density increase possible in receiving areas varies by jurisdiction, although the increase typically allows development of only one additional dwelling unit (du) per acre (e.g., 16 du/acre in 15/du acre zone). Of note, TDRs may be used in Olympia to increase or decrease density in the 4-8 du/acre residential zone. This is the only TDR program known to allow a density decrease. Decreased density is desirable in some receiving areas because it allows construction and marketing of larger houses on larger lots. Essentially, a homebuilder would have to use TDRs to build to less than 5 or more than 7 du/acre in such a zone. As with the Montgomery County TDR program, landowners in sending areas are encouraged to participate in the program to recoup equity lost as a result of downzoning.

Although no easements have been secured under the program, an easement template exists. The program calls for review of easements by county planning as well as the county's attorney. Like Montgomery County's TDR program, landowners are allowed to build one dwelling for every development right retained. For example, assuming that the owner of a 100-acre farm sells 18 of the 20 available development rights, 2 dwellings (in addition to existing structures) could be built in the future. Unlike some other PDR and TDR programs, subdivision of easement protected parcels is permitted in the Thurston County program, although each subdivided parcel must adhere to the terms of the easement that governed the original tract. While the TDR ordinance places monitoring responsibilities on the county, a procedure has not yet been defined. Finally, easements under the county TDR program may not be terminated.

The Thurston County TDR is an example of a county-level program which has not yet achieved its goal. Several issues have affected the program, including the fact that the program was based on the results of a feasibility study, rather than a community planning process. The program has suffered also from poor staffing and lack of promotion. Low participation may be partly attributed to landowner resentment stemming from the downzoning of agricultural land. Developers have been reluctant to participate in the TDR program because the density "bonus" available in some zones would not lead to increased profits. Developers also feel that land use restrictions (e.g., parking requirements, setbacks) in receiving areas further limit the potential density bonus. Despite the program's lack of success to date, it is worth noting that the concept of using TDRs to decrease

density may be a solution for Montgomery County, where homebuilders are building larger homes on larger lots.

NEW JERSEY PINELANDS DEVELOPMENT CREDIT PROGRAM

The New Jersey Pinelands Development Credit Program (Pinelands TDR) is an example of a TDR program that was created to protect much more than farmland. Indeed, the program was designed to protect agricultural land, animal habitat, historic resources, state forests, and even rural communities. With the exception of the Pennsylvania PDR program, the Pinelands TDR probably received more initial political support than any other PDR or TDR program in the country. The grassroots Pinelands Environmental Council formed in the early 1970s to address issues of protecting the environmentally sensitive New Jersey Pinelands region. Although there was some local opposition, the council's efforts were rewarded in 1979 when the state governor created the New Jersey Pinelands Commission at the behest of a Congressional mandate. The Commission oversaw development of a Comprehensive Management Plan and map defining the Pinelands Preservation Area and 8 categories of Protection Areas, which include Regional Growth Areas.

The NJPDCP is regional and top-down in its approach. While the Pinelands Commission administers the program, local jurisdictions (7 counties and 53 municipalities) process applications and plans. The commission is staffed full-time by 2-3 individuals, who certify Pinelands Development Credits (PDCs, another name for TDRs) through letters of interpretation. Staff of local jurisdictions perform site plan and project review and forward applications to the regional authority. The actual transfer of PDCs is conducted by the PDC Bank, an independent state agency with a 3-person staff.

The program is heavily promoted and both the Pinelands Commission and the PDC Bank provide public education. Each agency publishes a handbook that explains how the program works and their role within it. The PDC Bank also contacts landowners in sending areas on a periodic basis. In fact, the PDC Bank maintains a full-time staff position which does nothing but outreach to the development community to encourage participation in the program.

At the request of landowners in sending areas, the Pinelands Commission will send out a Letter of Interpretation, which states the number of PDCs available for the property. Pinelands Development Credits are calculated as follows: 1 TDR is calculated for every 4.9 acres in Agricultural Areas (9.8 acres in Preservation Areas) and 1 PDC is equivalent to 4 TDRs, hence a landowner in an Agricultural Area having 19.6 acres (or 39.2 acres in a Preservation Area) would have 1 PDC. Landowners who want to transfer their development rights apply to the PDC Bank for a PDC Certificate. The development rights are legally severed from the property in exchange for the PDC Certificate, which is a document that can

be bought/sold on the open market and which tracks PDCs throughout the process. While the landowner is responsible for application costs, the labor-intensive PDC allocation process is handled entirely by program staff. Although the PDC Bank is able to purchase PDCs, it is considered a buyer of last resort. Developers who plan to use PDCs in a project are not required to own the credits until the review process is finalized.

Sending areas within the NJPDCP include all 368,000 acres of the Preservation Area as well as about 60,000 acres encompassed by the Agricultural Areas and Special Agricultural Production Areas within the larger Pinelands Protection Area, which totals 1.1 million acres. Receiving Areas under the program are the Regional Growth Areas defined in 23 of the 63 jurisdictions in the New Jersey Pinelands.

The 368,000-acre Pinelands Preservation Area includes the region's critical environmental factors: the five Pine Barrens rivers, the East and West Plains of pygmy pines and oaks, cedar swamps, inland marshes and bogs, and the remains of historic towns and factories. Only new land uses compatible with the ecology of the central Pines are allowed in the Preservation Area, including forestry, cultivation of berries and native plants, and recreational facilities such as canoe rental or camping. Agricultural Production Areas are designated to accommodate and encourage farming within large existing concentrations of farmland in the western Pinelands. Agricultural Production Areas are grouped into blocks of at least 1,000 acres of active farmland and adjacent farm soil. Farming is actively encouraged in these areas and farmers are protected by enhanced Right-to-Farm ordinances.

Unlike the Thurston County TDR program, developers can realize significant density increases in New Jersey PDC program: up to 12 du/acre in some 8 du/acre zoning districts. Market demand for PDCs exists in part because the Regional Growth Areas can accommodate more than double the number of units that may be supplied by PDCs available in the sending areas. Developers have some flexibility in how PDCs are used. Bonus densities can be obtained using PDCs without additional plan review. PDCs can also be used to acquire zoning variances and may be staged along with project development.

Two PDR Banks operate as buyers of last resort in the program: the PDC Bank and the Burlington County PDC Exchange. Both banks were active during the early part of the program's tenure, before the private market for PDCs developed. Even though the banks were not authorized to pay more than 80 percent of the market value for PDCs, both were the primary purchasers of PDCs in the 1980s. By the early 1990s, most PDC transfers were taking place entirely in the private market and the Burlington PDC bank had sold all of its banked PDCs to private developers. As of the year 2000, acres protected by PDCs in the program were valued from \$442/acre in the Preservation Area to \$884/acre in the Agricultural Areas.

The terms of easements under the NJPDCP vary according to the sending area from which they came. Depending on the sending area, construction of agricultural facilities and housing for agricultural employees is generally allowed, although there are maximum “impervious surface” limitations. While easements technically permit Pinelands Commission members and their agents to enter any property with 24 hours of notice, tight development restrictions and the regimented review process mitigates the need for periodic monitoring. Conservation easements held under the NJPDCP are permanent; no termination clause or buy back option exists.

The keys to success for the New Jersey Pinelands TDR program are somewhat unique, although there are similarities to the Montgomery County, Maryland, program. The most unique aspect of the New Jersey case study is that the program was an outgrowth of Congressional and state mandates. Also, the program is founded in a Comprehensive Management Plan, rather than on a feasibility study. Like other successful programs of its type, the NJPDCP emphasizes public education and has a very strong internet presence. The Pinelands Commission web site features everything from maps and technical documents to a Kids Korner and Recipe of the Month made using Pinelands produce. The role of the PDC Bank early in the program is also important. The PDC Bank purchased development rights early on when there was minimal private market demand, an action which kick-started the program.

Along with successes come criticisms, which include the familiar issue of downzoning as unfair to landowners in the sending areas. The program has been criticized for being unable to adequately compensate landowners in sending areas, where zoning density has been reduced and environmental regulations have increased. Critics also note that the New Jersey TDR program is so complicated that an even better public education campaign would probably not dispel confusion. Finally, the easement assessment process is thought to result in lower values for Pinelands properties, which further reduces landowner equity, although this criticism has not been substantiated by empirical study.

BENEFITS AND DRAWBACKS OF TDR

Like PDR, TDR programs are capable of protecting land in perpetuity (AFT 2001). Since acquisition of the development rights in a TDR program is a private market decision, such programs are less expensive for local or state governments to implement than PDR programs. They also encourage managed growth by concentrating development in areas that are already served by public infrastructure. Participants in TDR are able to retain equity in their property without developing the land. Because they are market driven, TDRs tend to function better (i.e., preserve more land) when development pressure is high. TDR is considered to be more flexible than PDR because, while PDR has primarily focused on purchasing agricultural conservation easements, TDR has been used to protect environmentally and culturally sensitive areas such as wetlands and historic sites (AFT

2001). Owners of land that might otherwise be protected by more restrictive measures (e.g., agricultural protection zoning) may be able to receive some compensation under a TDR program.

Among the disadvantages often cited for TDRs is that they are market driven and “technically complicated and require a significant investment of time and staff resources to implement” (AFT 2001). It may also take a significant amount of public education to sell the concept. Also, like PDRs, TDR may not be able to establish the “critical mass” of farmland necessary for long-term agricultural or ecological stability (Nelson 1998). The downzoning associated with all three of the case studies reviewed here is clearly not popular with landowners in receiving areas, who are essentially forced to participate in the TDR program if they want to recoup equity in their properties. Finally, Peters (1990) cautions that TDR programs do not function well unless the following elements are present: 1) an informed and pro-active planning department, 2) a “strict exclusive agricultural zoning district with 20-acre minimum lot sizes,” and 3) a vibrant development market.

KEY ISSUES TO CONSIDER WITH TDR

GROUNDWORK AND PLANNING

The discussion in Chapter III of this issue as it pertains to PDR is relevant here. As with a PDR program, “if the community cannot agree on the necessity of a TDR program, they will not support it” (Stinson and Murphy 1996). The Montgomery County and New Jersey Pinelands programs demonstrate that proactive planning and ongoing public education programs are critical components of a successful TDR program. Montgomery County conducted a small pilot TDR program to both educate and enlist resident support; the pilot program also helped to determine that 25 acres was the minimum feasible farm size for the area (Mittra 1996). By contrast, the lack of a community based planning effort and failure to promote the program has seriously undermined the effectiveness of the Thurston County TDR. Involving property owners in the process of creating a TDR program will lead to acceptance and participation in the program. Education about the purpose of and function of TDR should be a part of a community visioning process which identifies the characteristics that define the community and quality of life (Stinson and Murphy 1996).

PROGRAM ADMINISTRATION

Like the PDR programs reviewed in Chapter III, adequate staffing is a necessary component of a good TDR program. Whereas the Thurston County program relies on help

from a handful of what are essentially part-time planners, both the Montgomery County and New Jersey Pinelands programs benefit from several full-time staff within multiple agencies. While administration of most PDR programs is directed by a board of appointees, the same cannot be said of TDR programs. Rather, TDR programs are usually administered by planning staff and integrated with existing zoning and site plan review processes. Since the very concept of transferrable development rights is complex, staff must be adequately trained to effectively run a TDR program. Finally, because many factors (e.g., the real estate market, location and characteristics of sending/receiving areas, public opinion, etc.) influence how well a TDR program functions, planning commission and staff must be quite competent (Mittra 1996).

Flexibility is a hallmark of a good TDR program and simplicity should be as well, although the arguably successful New Jersey Pinelands program has been accused of being very complex. In spite of its complexity, TDR use under the Pinelands program is very flexible. Developers are not required to have all the development credits in hand at the beginning of the plan review process. Development rights may also be used to negotiate zoning variances. Most importantly, PDCs in the New Jersey Program can be used to realize a significant increase in density. By comparison, only one additional dwelling per acre is allowed in most zones in the Thurston County TDR program. Taken in combination with other zoning regulations, developers in that county find that it does not make economic sense to participate in the TDR program.

FUNDING

Unlike PDR programs, where funding is as important as public support, TDR programs are usually less dependant on funding. The most significant costs of TDR programs are associated with staff and project administration, rather than easement acquisition. As such, the expense of a TDR program is quantified in terms of the costs of staff salaries and administrative support, rather than as a per-acre dollar amount.

TDR BANKS

The exception to the above funding issue is the TDR Bank, which is not a component of all TDR programs. The TDR Bank is usually seen as a buyer of last resort which can step in and pay a landowner for their development rights if there is no private market interest. A TDR "Bank" is actually a fund (created by the legislation or regulations which define the program) that ideally acts like a Revolving Fund, buying TDRs with initial seed money and then reselling them to an interested developer once a market develops. Of the three case studies, only the TDR Banks created for the New Jersey Pinelands program were active; they were also helped to kick start the program. Given the poor participation in the Thurston County TDR, it seems likely that a TDR Bank would have benefitted that

program. Since a TDR Bank would act as a Revolving Fund, only an initial investment of public funds should be needed. Like a PDR program, this funding could come through bonds, taxes, appropriations, grants, or other sources. To be effective, the TDR Bank would buy TDRs at below market value (e.g., 80% in the New Jersey Pinelands case study), sell them at full value at a later date, and return the difference to the bank for future acquisitions. Landowners would only sell to the TDR Bank in the event that the private market for TDRs is not active.

SENDING AREAS

The issue of what to protect is as central to TDR as it is to PDR and the discussion of this topic in Chapter III is relevant here. The sending areas of a TDR should be located to protect the resources valued by the community. Stinson and Murphy (1996) note that “if the community agrees that wetlands, or farmland, or architectural treasures are critical resources that define the character of the community and contribute to the quality of life, the community is more likely to coalesce behind the TDR program and overcome the socio-political inertia that impedes the implementation of such an innovative program.” In all three case studies presented in this chapter, the protection goals of the TDR program were clearly defined, as were the sending areas. To be successful, a TDR program must have public and political backing for the preservation goals, and sending/receiving areas.

To determine sending areas, a community should first engage in an assessment to decide what the community wants to see protected (i.e., farmland, open space, historic sites, wetlands, hillsides, etc.). The locations of areas to be protected are then mapped and sending areas delineated to protect them. The next step that should be taken is an increase in land use regulation in the sending areas, usually accomplished through a zoning change (Mittra 1996; Stinson and Murphy 1996). This almost always involves a change in zoning in agricultural districts from 5-acre to 25 or even 40-acre zoning. In Montgomery County, there has also been a conscious effort to limit capital improvements within and extension of public services to the sending area.

All three case studies presented here demonstrate that tightening the land use regulations in sending areas is a politically tenuous process apt to create resentment among landowners. Other problems may also arise during the process of establishing sending areas. In Collier County, Florida, the sending areas were designated so far from the receiving areas that residents of the latter could not appreciate the concept of preserving the former; the program suffered as a result (Mittra 1996). In the absence of a regional authority, defining sending areas that lie across multiple jurisdictions is also problematic (Stinson and Murphy 1996). The New Jersey Pinelands TDR was successful because the regional authority was empowered to operate across numerous jurisdictions. By comparison, the sending areas issue was “hotly contested” in the Long Island Pine Barrens TDR program, which lacked a powerful regional authority (Stinson and Murphy 1996).

Finally, Mittra (1996) notes that TDR programs which leave some undeveloped areas of the community out of the program are less successful than those which define all undeveloped land as either sending area or receiving area.

RECEIVING AREAS

Ideally, receiving areas should be located where sufficient existing or planned infrastructure will support the increased development. Residents of proposed receiving areas are likely to take a Not In My Back Yard (NIMBY) stance to the project as did the residents of Collier County, Florida (Mittra 1996). Typically, the NIMBY argument will be that increased density resulting from TDR will degrade community character, lead to greater congestion, and lower property values in the receiving areas (Stinson and Murphy 1996). However, the community has the legal right to change the zoning in TDR sending areas if it benefits the public welfare. From a practical standpoint, the public education campaign of the TDR program must demonstrate that the orderly growth created by the TDR and its sending and receiving areas is a component of a well planned community and that such “smart growth” will lead to increased property values and reduced congestion in the long run (Stinson and Murphy 1996).

Mittra (1996) argues that carefully designing receiving areas and the regulations that govern them are the key to spurring the TDR market. The private market will not develop unless there are more receiving area sites than TDRs available in sending areas. Limiting the supply of TDRs creates competition among developers for them. Second, and as noted above, receiving areas must be located where development can readily make use of existing or planned infrastructure. Finally, sending area regulations must be strict enough (e.g., 25-acre zoning) and receiving area base density low enough that developers find it economically advantageous to buy TDRs to increase density (Mittra 1996). The New Jersey Pinelands TDR program suffered initially because the base density in receiving areas allowed development of 6 du/acre (Mittra 1996). As a result, developers found no real advantage to buying TDRs to build above the base density. Likewise, low participation in Thurston County’s TDR resulted in part because it was not financially attractive to buy and use TDRs if the reward was an increase in density from 7 du/acre to 8 du/acre or 15 du/acre to 16 du/acre).

One other factor that must be considered in receiving area design is the type of development that may occur there. With the exception of some receiving areas in the Thurston County example, the programs reviewed in this study employ residential receiving areas. However, other programs have encouraged TDR transfers from residential to commercial zones. A pilot TDR program in King County, Washington, allows developers to use TDRs to build extra floors on office buildings in downtown Seattle (Pruetz 1999). The City of Seattle TDR program has promoted the use of TDRs to increase commercial square footage since the mid-1980s. The Tahoe Regional Planning Agency (TRPA) TDR program

has also recently begun allowing the conversion of residential unit TDRs into commercial floor area. Mitra (1996) argues that TDR is probably best applied to clustered mixed-use development, which is more cost effective and uses infrastructure better than single-use commercial, residential, or industrial uses.

ESTABLISHING A MARKET FOR DEVELOPMENT RIGHTS

“Inspiring participation and active trading in the TDR market” is the most challenging aspect of implementation and is critical to the success of a TDR program (Stinson and Murphy 1996). As discussed above, properly designed sending areas and receiving areas are an essential first step in the creation of the market for TDRs. In addition to limiting density in the receiving areas, the receiving areas should be drawn to accommodate more TDRs than the sending areas can create (Mitra 1996; Stinson and Murphy 1996). By the same token, the base density in the sending area must also be low enough to discourage development there. While overall Montgomery County’s TDR is successful, it is becoming clear that the base density of 1 du per 25 acres established in the sending area may not be low enough: wealthy home buyers simply establish 25-acre estate lots.

The level of existing development in sending areas and receiving areas and the overall rate of development in the community also must be considered. A TDR program will not work in a community where development is not already occurring at an appreciable rate. However, too much existing development in either sending or receiving areas may be problematic. High levels of existing development in sending areas could lead to inflated property values and TDRs that are too expensive to purchase (Stinson and Murphy 1996). Further development in sending areas that are already built up will likely be resisted.

Unlike PDR programs, where the value of development rights is almost always determined by an assessment on a case by case basis, the value of development rights in TDR programs is determined by the private market. In Montgomery County, the real estate market was so strong in 1996 that TDRs were worth \$11,000 (\$2,200 acre). TDRs in Montgomery County were also valuable because supply did not grossly outweigh demand. The county’s PDR program helped decrease the supply by “removing” the development rights of some properties from the market. By comparison, the per-acre value of development credits in the New Jersey Pinelands example has stayed below \$1,000.

A TDR bank may be necessary to jump start the private market in TDRs, especially in the beginning. In the absence of any private TDR transactions, the TDR bank may set the initial value for TDRs. The theoretical value of TDRs can be estimated by calculating the value of development rights for properties within the sending area according to previous zoning. In Montgomery County, the value of one TDR is supposed to be equivalent to the value of the development rights of five acres in the sending area. This approach, which assumes that all sending area parcels have similar characteristics, may be unfair if one property has much more development potential than another (Mitra 1996). An alternative

to this method involves using GIS to factor in the development potential of individual tracts. The Letter of Interpretation issued to landowners under the New Jersey Pinelands program reflects such a calculation. Another way to estimate the value of a TDR is to ascertain the value of the additional house a developer could build with that TDR. Regardless of the private market, landowners in sending areas will expect to receive compensation from someone, either developers or the government, for the equity lost as a result of downzoning.

TDR AND LAND USE PLANNING

TDR programs ought to be enabled by state legislation and should be part of the goals and objectives of the community comprehensive plan (Mittra 1996). A TDR program should also be consistent with the goals of existing regional or state land use plans. In the absence of state enabling legislation, a community may still be able to implement a TDR program that is wholly a function of its zoning (Mittra 1996). Even downzoning in sending and receiving areas is legally defensible if it can be demonstrated that such an action meets the objectives of the comprehensive plan.

TDR is much more closely integrated with site plan review than PDR and, as mentioned, zoning in the sending and receiving areas must be changed to create a successful TDR program. The community is also cautioned against allowing too much flexibility under its zoning (Stinson and Murphy 1996). A developer will be reluctant to purchase TDRs to build to a higher density in a receiving area if the same density can be achieved in another zone. For example, if existing cluster regulations make it possible to build 12 du/acre on one parcel, a builder would hesitate to buy TDRs to build to the same density on a parcel with similar characteristics (i.e., location, public services, etc.).

COURT CASES RELATING TO TDR

As of early 2001, there had been no court cases in Kentucky relating to TDR, although several court cases relating to TDR have played out in other states around the nation. Three of these are discussed here to clarify some of the legal issues surrounding TDR.

French Investing Co. v. City of New York (1976)

This seminal case revolved around the rezoning by the City of New York of two 0.34-acre parks, which French Investing planned to develop to full residential density under existing zoning (Stinson and Murphy 1996). The New York City Planning Commission created a Special Park District for the French property, which prevented its development but permitted transfer of the development rights to any receiving area in Manhattan. The New

York Court of Appeals ruled in favor of French Investing, stating that a landowner may not be deprived of all but the “bare residue” of the economic value of a property under zoning. The court also said that TDR did not provide a reasonable return for the owner in this case since the transfer was mandatory and the private market for TDRs was weak (Stinson and Murphy 1996). While the court invalidated the rezoning, it recognized that development rights may be assigned to property through zoning and that these rights may be transferred.

Penn Central Transportation Company v. City of New York (1977)

This case, which involved the designation of Grand Central Terminal as a New York City landmark, is considered a landmark for its relevance to both historic preservation and TDR (Murtagh 1987). Penn Central was denied its request to build a 50 story office tower above Grand Central Terminal and claimed that it was deprived a reasonable return because of development restrictions related to the property’s landmark status. The City of New York argued that Penn Central was not denied a reasonable return because they were able to transfer the development rights above the terminal to a nearby receiving area. The Court held that the value of these rights may be considered in determining whether the owners were able to receive a reasonable return on their investment, although it recognized that TDRs may not be worth as much as they were on their original site (Stinson and Murphy 1996). In the *French* case, the owners were deprived of their property without due process because the development rights on the original site were quite valuable and regulations both prevented use of that site and left the owners with TDRs of questionable value. The regulations in the *Penn Central* case allowed a continued productive use of the original site and permitted transfer of the development rights to a viable receiving area. This case is significant because it recognized the utility of TDR and established a threshold for their use in determining the validity of land use restrictions.

Suitum v. Lake Tahoe Regional Planning Agency (1997)

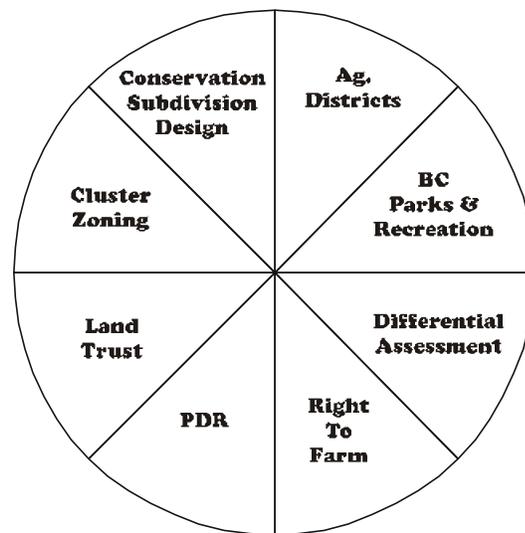
In the *Suitum* case, the Lake Tahoe Regional Planning Agency (TRPA) would not let Bernadine Suitum build a house on her property, which was located in a protected area eligible as a sending area in TRPA’s TDR program. Suitum appealed TRPA’s denial in federal district and circuit courts on the basis that TRPA’s denial was a taking without just compensation. The lower courts ruled that Suitum’s case was not “ripe for review” (i.e., that it was premature) because she had never applied to sell her development rights and the courts had no way to determine whether the value of her TDRs was fair compensation. Although the U.S. Supreme Court’s 1997 decision did not address the issue of whether the availability of TDRs negated a taking, three Justices concluded that the value of TDRs could not be considered in determining whether or not a land use restriction resulted in a taking. After the Supreme Court sent the case back to the district court to make a finding as to the market value of Suitum’s TDRs, Suitum and TRPA settled the matter out of court.

These three court cases are arguably the most salient to the legality of TDR. The validity of TDR as a function of local government was established in the 1970s by the *French* and *Penn Central* cases, which recognized that development rights could be severed and transferred from a property and that the value of TDRs may prevent a taking without just compensation. The precedent established by these cases was shaken by the *Suitum* case, although the central question of whether the value of TDRs could be used to avoid a taking was not addressed. Court decisions in other cases, including *Barancik v. County of Marin* (1989) and *City of Hollywood v. Hollywood, Inc.* (1989) have indicated that downzoning in sending areas is justified if it meets the preservation objectives of the community's comprehensive plan (Mittra 1996).

CHAPTER V: THE LAND CONSERVATION TOOLBOX

This chapter summarizes and evaluates some of the land conservation techniques that are either in use or available to Boone County, aside from PDR and TDR (see Figure 2). Together, these techniques are often referred to as a land conservation “toolbox,” of which PDR and TDR are arguably the most innovative tools. It is evident that Boone County cannot protect farmland or open space areas solely through PDR, TDR, or any one or two of the techniques described in this chapter. A complement of techniques is needed to achieve the right land use pattern.

FIGURE 2: THE LAND CONSERVATION TOOLBOX



The toolbox approach is better able to preserve farmland and other resources if it includes a mix of incentive-based and regulatory approaches. Regulatory techniques like zoning and subdivision regulations specify land use restrictions and development capacity. Theoretically, these tools guide development to ensure the health, safety, and general welfare of the community, although they have the potential to affect property values, depending on location. Incentive-based techniques like Ag Districts and Differential Assessment mitigate this effect to some degree, although they do not actively preserve land. A mix of regulatory and incentive-based techniques is capable of meeting the needs of a broader range of landowners. For example, while a wealthy landowner may be interested in donating a conservation easement to a land trust for tax purposes, this may not be feasible for a small farmer who stays in business because the farm is within an Ag District and is assessed at agricultural value for tax purposes. Of these two individuals, the farmer is the one who is going to be interested in selling development rights under a PDR program. The toolbox approach also spreads the cost of land conservation among the community,

whereas the community benefits from the increased quality of life afforded by the retention of open space and conservation of rural character.

AGRICULTURAL PROTECTION ZONING

The American Farmland Trust defines Agricultural Protection Zoning (APZ) as “ordinances that allow no more than one house for every 20 acres, support agricultural land uses, and significantly restrict non-farm land uses” (AFT 1998b). APZ differs from traditional zoning, which protects the public health, safety, and welfare by guiding the orderly development of land, because it “views agriculture as a fully developed land use [and] is intended to protect that agricultural land” (Kelsey and Lembeck 1999). By comparison, conventional zoning often sees agricultural land as vacant property waiting to be put to some other ‘highest and best’ use.

There are two types of APZ: exclusive and nonexclusive (Nelson 1992). Exclusive APZ restricts the use of designated zones to farming (usually commercial farming); nonexclusive APZ is less restrictive. At the core of APZ is minimum lot size, which depends upon the dominant type of farming in the community. For example, while farmers in Montgomery County may only require 25 acres, ranches in the Western United States need 300 acres to be profitable. Generally, 20 acres is the minimum size recommended for APZ, although Nelson (1992) suggests that anything less than 40 acres may create “leapfrog” development. APZ ordinances specify areas where farming is the most appropriate land use based on soils and topography. Such ordinances usually restrict residential density, promote farm-related commercial activities (e.g., produce stands), and strictly enforce Right-to-Farm laws. Unlike Agricultural Districts, which are voluntary in nature, Agricultural Protection Zones are mandatory under local zoning ordinances. Some APZ ordinances also require farmers to engage in farm management or conservation planning.

APZ came into use in the mid-1970s in rural counties in Pennsylvania, California, and Washington (AFT 1998b). A 1995 survey by AFT estimated that about 700 jurisdictions in 24 states used some form of AZP. The theory behind APZ is that assembling a large and contiguous mass of farm land will stabilize a community’s agricultural base and prevent farms from becoming islands surrounded by commercial and residential development. Large areas of farmland encourage the retention of the types of infrastructure and support required by farmers (e.g., farm equipment sales and repair facilities, livestock veterinarians, seed/feed mills) (AFT 1998b). APZ is also viewed as a means for keeping land values low enough that farmers can afford to own and work their property.

According to the American Farmland Trust, APZ may be advantageous because it: (1) is an inexpensive and easily managed tool, assuming that zoning exists, (2) separates agricultural uses from non-farm uses, (3) reduces infrastructure costs, (4) is an easier concept to sell than PDR or TDR because it is based on a familiar concept, and (5) it is

flexible enough to be modified as economic conditions fluctuate (AFT 1998b). Some drawbacks of APZ are: (1) it is not permanent and can be modified if the local ordinance is changed, (2) may reduce property values, and (3) may be difficult to monitor (AFT 1998b).

Two agricultural zones are established by Article 6 of the Boone County Zoning Regulations: Agriculture (A-1) and Agricultural Estate (A-2). Neither of these would be considered APZ by the American Farmland Trust definition, primarily because neither restricts density to less than one residence per 20 acres. Indeed, while the stated purpose of the A-1 district is to “preserve and protect the supply of productive agricultural lands and other open space, primarily for non-urban uses,” this zone allows an intensity of no more than one lot per five acres (Boone County Zoning Regulations 1996).

Under KRS 100.201 to 100.203, APZ could be established in Boone County to complement the existing A-1 and A-2 zones. However, its purpose and effect would be difficult to justify for several reasons. Since development pressure and land values are already peaking in the most arable parts of Boone County, APZ might be a difficult concept to sell. Simply defining what to protect would also be problematic when using a technique specifically designed to protect farmland in a community where the conservation goals extend beyond agricultural land. Further, it might be too late to assemble the “critical mass” of farmland needed to again make it economically attractive. As a mandate, APZ in Boone County could unfairly reduce the value of land owned by non-farmers located within agricultural zones. Finally, as a form of zoning, APZ is not permanent and protecting land with it may only delay the inevitable.

AGRICULTURAL DISTRICTS

Agricultural Districts (Ag Districts) “allow farmers to [voluntarily] form special areas where commercial agriculture is encouraged and protected” (AFT 1998a). The concept was pioneered by California and New York in the late 1960s and early 1970s. Note that some states, including Pennsylvania, refer to them as Agricultural Security Areas (ASAs) rather than Ag Districts. In 1982, Kentucky became one of 16 states with enabling legislation permitting Ag Districts. Ag Districts are enabled in Kentucky by KRS 262.850, the stated purpose of which is to “provide a means by which agricultural land may be protected and enhanced as a viable segment of the state's economy and as an important resource” (KRS 262.850-2). The details of Ag District laws vary by state, although eligibility for differential assessment, protection from annexation, enhanced Right-to-Farm enforcement, and eligibility for state PDR programs are typical provisions. Kentucky’s Agricultural District and Conservation Act (KRS 262.850) stipulates similar provisions and requires that an Ag District contain at least 250 contiguous acres and that each landowner within the district have at least ten (10) acres of agricultural land (11 acres with a housing unit). Potential Ag District properties must also meet the Kentucky definition of Agricultural Land. In Kentucky, Ag Districts are established through a petition made by the landowners and are reviewed every

five years. In addition to the above benefits, Kentucky Ag Districts members receive high priority for state cost share assistance for farmers.

In Boone County, Ag Districts are administered by the Conservation District, and are designed to “allow farmers to form special areas where commercial agriculture is encouraged and protected” (Kentucky Ag District Fact Sheet; Boone County Comprehensive Plan [Comp Plan] 2000). Currently, there are 12 Ag Districts in Boone County encompassing about 7,800 acres and including 85 property owners (Comp Plan 2000; Dickerson, Personal Communication, 2001). The fact that 4.7 percent of Boone County’s land area is included within Ag Districts suggests that the county’s farmers are taking advantage of the program, although the program has only recently become popular in Boone County. Dickerson (2001) notes that, “according to Boone County Conservation District records, there was a flurry of activity when the law was first passed [in 1982], but it slacked off until about five years ago.” There has been renewed interest in Ag Districts in Boone County in the last few years, especially since conservation district staff began sponsoring a farmland conservation forum and started to work intensively with individual farmers. Participation in the Ag District program appears to be directly related to the amount of time and effort the conservation district is able to devote to publicity and education about the program.

The greatest benefit afforded by Ag Districts is their flexibility, since they can be adjusted to suit the needs of the locality (AFT 1998a). In addition, Ag Districts offer a suite of incentives to encourage farming and work to create a critical land mass to keep farming viable. Ag Districts can also stabilize the land base with minimal public expenditure and are popular because of their voluntary nature. The major disadvantages of Ag Districts is that they are (1) voluntary in nature, and (2) designed to ease the financial burden of farmers, rather than preserve farmland, let alone green areas, open space, or woodlands. Most Ag Districts also have little means for addressing the public infrastructure that makes development feasible. While Ag Districts are beneficial to farmers and can help to make farming more viable, they are not a permanent long-term solution to the issue of land conservation.

DIFFERENTIAL ASSESSMENT

Differential Assessment is a form of property tax relief that allows agricultural land to be taxed at a lower rate than it would be if assessed at fair market value, which is usually higher (AFT 1998c). Differential assessment is sometimes referred to as current use or use value assessment. Maryland created the first differential assessment law in 1956 and, by 1989, every state except Michigan had enacted some form of differential assessment legislation.

In Kentucky, differential assessment of agricultural and horticultural land is enabled by KRS 132.010 to 132.454 and by Article 172a of the Constitution of Kentucky. In Boone County, agricultural tracts of 10 or more acres are assessed at an agricultural value of \$150 to \$500 per acre, although improvements (i.e., houses, farm facilities, etc.) are assessed fully (Boone County Property Valuation Administrator [PVA] 2001). Agricultural tracts of less than 10 acres are assessed at fair market value. Currently, 103,580 out of 164,120 acres in Boone County are assessed at agricultural rates. Although the state is encouraging the use of an optional 8-tier classification system for agricultural land assessment, most counties in Kentucky, including Boone County have not yet implemented this optional system. The agricultural value assessment is levied at the request of the property owner, who must sign an agreement with PVA. By comparison with Ohio, where Current Agricultural Use Value (CAUV) is determined by a complicated formula that determines “agricultural worth,” differential assessment for agricultural land in Boone County is streamlined and straightforward (Jeffers and Libby 1999).

According to AFT (1998c) Differential Assessment laws have three purposes: (1) “to help farmers stay in business by reducing their real property taxes, (2) to treat farmers fairly by taxing farmland based on its value for agriculture, rather than at fair market value as if it were the site of a housing development and, (3) to protect farmland by easing the financial pressures that force some farmers to sell their land for development.” Theoretically, differential assessment allows farmers to keep their property in active agricultural use rather than sell it to pay taxes that cannot be realized through farming. Without differential assessment, farmers pay for public services that: (1) are taxed on a per-acre basis at a rate suitable for residential and/or commercial land uses, (2) benefit them little (Jeffers and Libby 1999).

Differential assessment laws “help correct inequities in the tax system” and help to make farming economically viable for property owners who want to continue farming (AFT 1998c). However, like Ag Districts, differential assessment is designed to protect farmland only and, as a passive measure, does not ensure long-term conservation (AFT 1998c). It has also been argued that differential assessment laws subsidize farmers at the expense of residential, commercial and industrial land uses (Jeffers and Libby 1999).

ESTATE TAX RELIEF

Enabled by Kentucky’s “Death Taxes” statute (KRS 140.300 to 140.360), estate tax relief is a form of tax relief that permits agricultural or horticultural land to be assessed at the lower agricultural rate, rather than at the higher rate used to calculate inheritance tax on land assessed at fair market value. Kentucky law requires that land subject to estate tax relief be agricultural land for at least five years prior to the inheritance transfer. Additionally, Kentucky law imposes a penalty if inherited land assessed at the agricultural rate is converted to a non-agricultural use within five years after the transfer. The Boone County

PVA assesses agricultural land at \$500 an acre for inheritance purposes under the same criteria described above.

In theory, estate tax relief may reduce the tax burden of a farm inheritance and encourage a farmer's heirs to continue in the family business. However, like differential assessment, estate tax relief is not a powerful enough incentive to ensure that land remains agricultural.

RIGHT TO FARM LAWS

Right-to-Farm laws are usually set up to (1) strengthen the legal position of farmers when neighbors bring nuisance lawsuits against them and (2) protect farmers from anti-nuisance legislation and unreasonable public control over their property (AFT 1998f). Between 1963 and 1994, all 50 states enacted some form of Right-to-Farm legislation.

Kentucky's Right-to-Farm law, KRS 413.072, protects agricultural and silvicultural (timber harvesting) operations from nuisance lawsuits and zoning violations, providing that the operation has been in existence for one (1) year and was not a nuisance at the time it began. Some states' Right-to-Farm laws enable farmers to recapture legal costs lost due to nuisance lawsuits, although Kentucky's statute contains no such provision.

In 1996, Boone County enacted a local version of a Right-to-Farm law (Boone County Code of Ordinances, Title IX, § 93.20 to .99). The ordinance established a process for resolving disputes arising from nuisance complaints and set up a 5-member grievance committee, which includes the following individuals (or their designees): an appointee of the County Judge/Executive, the County Extension Agent for Agriculture, the Executive Director of the Planning Commission, the President of the Farm Bureau, and the President of the Northern Kentucky Home Builders Association. After hearing both sides of the dispute, the committee must render a written decision on a complaint, which is an advisory statement only. To date, the Grievance Committee has heard only one case.

The fact that Boone County has a grievance committee to help mediate disputes stemming from perceived agricultural nuisances demonstrates that (1) farming and other land uses are increasingly coming into conflict in Boone County, and (2) the county is serious about protecting its farmers from nuisance lawsuits. While Right-to-Farm laws are an important component of the suite of tools designed to make farming more viable, especially in communities experiencing sprawling development, they are not attractive enough to prevent or forestall conversion of farmland.

LAND TRUSTS

Land Trusts are “privately based, nonprofit, tax-exempt charitable corporations and partnerships whose primary focus is to conserve open space or purchase conservation easements” (NAHB 2001). Land Trusts are usually operated by private entities funded through membership dues, donations and grants, although Pennsylvania’s PACE program was recently authorized to award grants of up to \$5000 for eligible land trusts to defray expenses incurred from acquiring agricultural conservation easements (Stinson and Wilson 1996). The Nature Conservancy and Trust for Public Land are examples of well-known national land trusts. However, there are over 1200 nonprofit Land Trusts currently operating in the United States, most of them operating at the local, state, or regional level (Land Trust Alliance 2001; NAHB 2001).

Some Land Trusts maintain a pool of funds and work towards acquiring land in a manner similar to PDR (Peters 1990). Others are set up to manage the administrative tasks associated with the transfer of donated real property or conservation easements. Unlike PDR, TDR, and APZ, two thirds of Land Trusts focus on non-agricultural lands such as wildlife habitat, open space, wetlands, and greenways (Stinson and Wilson 1996; Land Trust Alliance 2001). Land trusts are generally a great option for conservation minded landowners who need a tax break more than PDR dollars and who do not want to sit on a PDR program waiting list. Land Trusts fill an essential role in the land conservation toolbox. Working together, a private land trust and government PDR program can protect more land than either entity could by themselves.

The underlying goal of a Land Trust is to “remove land from the real estate market to eliminate the temptation for private owners to sell to developers” (Stinson and Wilson 1996). Land Trusts use four methods to achieve this goal: (1) purchasing land, (2) receiving donated land, (3) brokering sales of private property to government agencies, and (4) securing/enforcing conservation easements on private property (Stinson and Wilson 1996; NAHB 2001). The National Association of Home Builders states that “helping to establish and fund a land trust might be a good project for a local home builders association and a local environmental group to work on together” (NAHB 2001). Indeed, land trusts are one of the entities that homebuilders may partner with to protect land within conservation subdivisions (Arendt 1999).

The Boone Conservancy is a land trust based in Boone County that was chartered as a 501(c)(3) non-profit organization in late 1999. The Boone Conservancy is “dedicated to the creation of parks and conservation of land with unique and/or significant recreational, natural, scenic, historical or cultural value” (The Boone Conservancy 2001). The organization seeks to work with Boone Countians “who recognize that planning for appropriate land conservation improves the quality of life and increases economic prosperity for Boone County ... [and] pursue its mission through the voluntary acquisition of land and interests in land” (The Boone Conservancy 2001). In July, 2000, Toyota granted \$50,000 to The Boone Conservancy to help the group advance its goals of land conservation, resource protection, parks development, and environmental education. Although The Boone

Conservancy has not yet received any land donations or acquired interest in any properties, it has identified several priority areas in Boone County and is actively discussing projects with several property owners.

As with the other land conservation strategies discussed in this chapter, land trusts have both positive and negative aspects. The National Association of Home Builders observes that “land trusts offer all the features of land sales and negotiations between two private parties: quick response, flexibility, and confidentiality” (NAHB 2001). Since most land trusts are private, non-profit organizations, they have more leeway than government sponsored agencies when it comes to property acquisition (Stinson and Wilson 1996). A land trust, for example, may be able to sign an agreement on very short notice or buy property at auction, two actions that a government agency would be hard pressed to complete. On the other hand, land trusts may have trouble locating continued funding, since they do not have the power to raise money through bonds or taxes. The appraisal process and charitable gift “incentive” that land trusts rely upon may be very complex and difficult to assess (NAHB 2001). There is growing sentiment, especially in the northeast United States, that land trusts may be created for use as a tax break by wealthy landowners (NAHB 2001). Although land trusts are a valuable addition to the land conservation toolbox, most do not have the resources to protect and monitor large and contiguous tracts of land.

CLUSTER ZONING/DEVELOPMENT

AFT defines Cluster Zoning as “a form of zoning that allows houses to be built close together in areas where large minimum lot sizes are generally required” and recommends that no less than 80 percent of a site developed under cluster regulations be reserved for open space or farming (AFT 1998d). Cluster Zoning, which is also commonly referred to as Cluster Development or Open Space Zoning considers a parcel in its entirety rather than on a lot by lot basis. By concentrating housing in a few of the least developmentally sensitive areas, it leaves a significant percentage of the parcel undeveloped (Daniels 1997; Murphy and Stinson 1996). The NAHB recognizes cluster zoning as one of several ways to reserve open space in subdivisions (NAHB Sensible Growth Working Group [SGWG] 2001). From 30 to 80 percent of the total area of a developing parcel may be set aside for open space by clustering small building lots in one or two sections of the tract. “The remaining land is restricted by easement and placed in the control of a Homeowners Association (HOA), land trust, public entity, or retained by the original owner” (NAHB SWGW 2001).

Cluster zoning regulations in traditional zoning codes permit development at a higher density on a tract within a given zone, providing that certain provisions (e.g., a minimum percentage of the tract is not developed) are met. Cluster development differs from a Planned Unit Development, which typically includes housing, business, and services with the goal of developing most of the tract to meet the needs of a contained community (Murphy and Stinson 1996).

Cluster development is permitted in both agricultural zoning districts and all residential zoning districts except Mobile Home Park (MHP) in Boone County. A subdivision designed under these regulations must have the “same overall gross density of total dwelling units per total acres and the same permitted uses under the existing zoning district, however lot dimension and setback requirements are less restrictive” (Article 31, Boone County Zoning Regulations 1996). Boone County’s cluster zoning does not allow development at a higher overall density, but encourages building at a higher density on portions of a tract providing that “remnant land not designated as buildings lots ... be left undeveloped [to] serve the purpose of effective buffering, passive recreation, conservation of significant vegetation, significant historic preservation, or scenic qualities” (Article 31, Zoning Regulations 1996). Typically, the County’s cluster regulations allow minimum lot sizes 50 to 61 percent smaller than normally required in a given district. While minimum lot size in the Agricultural Estate (A-2) zone is 80,000 square feet, minimum lot size is reduced to 40,000 square feet under the cluster regulations. Minimum yard setbacks are also reduced by up to 50 percent under the County’s cluster regulations.

Cluster zoning has been touted as a vast improvement over the “cookie cutter” approach to subdivision design that has dominated the last 50 years of American homebuilding (Arendt 1997a). Daniels (1997) argues that “open space zoning can be a useful transition tool in fringe areas where public sewer and water facilities and adequate transportation networks are available.” Preservation of open space, wildlife habitat, stream valley corridors, active/passive recreation, woodlands, “rural character,” and historic resources are all possible under cluster zoning (Arendt 1997a; Murphy and Stinson 1996). Cluster development also lowers the cost of development because it concentrates costly on-site infrastructure. Cluster development may give a farmer an influx of cash through sale of a portion of the farm for development, yet allow the farmer to continue farming most of the property that was sold (Arendt 1997a; Daniels 1997). In such situations, cluster development is particularly effective at preserving “rural character” and serving as a buffer between rural and developed areas.

While cluster development has many advantages, it is “tailored for the protection of ‘rural character,’ not of a working rural landscape featuring commercial farming operations” (Daniels 1997). In fact, cluster zoning was not developed as a farmland conservation tool, and like any other form of suburban development, cluster zoning brings more people into rural areas leading to conflicts between residential and agricultural uses. Cluster zoning may be viewed as a “quick fix” by officials and planners, especially in jurisdictions where property rights advocacy and development interests are strong. Cluster zoning has been accused of emphasizing site planning at the expense of comprehensive planning and of promoting the “Impermanence Syndrome,” where farmers limit investment in their farms because they expect that the farm will ultimately become developed (Arendt 1997a).

In 1997, a cursory review of five subdivisions (Cardinal Cove, Hampton Ridge, Liberty Crossing, Orchard Estates, and Pebble Creek) developed according to Boone County’s

cluster regulations was conducted. The review found that these subdivisions were using more acreage (about 8,000 square feet) per lot than needed under cluster zoning, which allows lots as small as 4,000 square feet. Further, these subdivisions provided few of the positive benefits of open space development, and access to the open space itself was not sufficient. Typically, the open spaces reserved in the developments were located at the back of the subdivision or were used as extended back yards by individual lot owners. Finally, it was found that none of the subdivisions had preserved existing natural features of their sites. Rather, the site area was developed by clearing and starting from scratch, like most other residential subdivisions.

Daniels (1997) remarks that “the function of open space zoning and cluster design is not to protect farmland, but to allow rural landowners to realize their anticipated capital gain, to encourage people to move farther out into the countryside, and to protect the viewshed of new, upper-income residents who enjoy looking at open space” (Daniels 1997). The minimal utilization of cluster regulations in Boone County attests to the fact that it is rarely used by developers unless incentives such as density bonuses are available. Cluster zoning may also create scattered pockets of communal space serving individual developments, rather than contiguous agricultural land capable of supporting working farms. Cluster zoning is also not an effective farmland conservation tool where agricultural zoning densities are greater than 20 acres (Arendt 1997a). While cluster zoning is probably appropriate for certain parts of Boone County, it was simply not designed to preserve large tracts of contiguous acreage.

CONSERVATION SUBDIVISION DESIGN

The conservation approach to subdivision design is advocated primarily by Randall Arendt, who has authored numerous books and articles on the subject (Arendt 1996, 1997a, 1997b, 1999; Arendt et al 1993). While conservation subdivision design is often lumped together with Cluster Zoning, Arendt (1997b, 1999) argues that the conservation approach “differs dramatically” from cluster subdivision design. Whereas cluster zoning usually requires that 25 to 30 percent of a tract be maintained as open space, the conservation approach leaves 50 to 70 percent of a parcel as open space. While clustered subdivisions focus on site-level planning, conservation subdivisions combine good site planning with a comprehensive view of how individual developments fit within a community open space preservation plan (Arendt 1997b). Finally, Arendt (1997b; 1999) argues that the conservation approach permits full density only when 50 percent of the open space in a tract remains, while full density may be achieved under cluster zoning with very little provision for open space.

Conservation subdivision design requires more than just well crafted zoning regulations and quality site planning to be successful. Before zoning and site planning are even discussed, an Areawide Map of Potential Conservation Lands must be developed and

included in the comprehensive plan (Arendt 1997a, 1999). The map identifies all natural and cultural features worth preserving, as well as areas lacking such features where development is most appropriate. The zoning regulations for conservation subdivisions are multi-tiered such that several development options are available within certain zones to allow design flexibility which still meets the community's goals for conservation. Site planning must follow a Four Step Design Process for Conservation Subdivisions, which includes: (1) identifying potential conservation areas (in accord with the Area Map), (2) locating house sites to both protect and benefit from conservation areas, (3) designing streets and walkways, and (4) drawing in the lot lines.

Arendt (1997a) observes that conservation subdivision design should not be used to protect farmland in areas with vibrant farming economies or as a tool to protect large scale commercial farming. Rather, the approach is seen as a means for providing "deep buffers" between residential and adjacent farming uses. The Boone County Zoning Regulations and comprehensive plan are not currently set up to facilitate true conservation subdivision design, although a review of this will be conducted as part of the 2001 zoning update.

BOONE COUNTY PARKS DEPARTMENT

An active component of the land conservation toolbox in Boone County is the Parks Department. The 2000 Comprehensive Parks and Recreation Master Plan (Parks Master Plan) notes that, while significant additions (e.g., England-Idlewild and Central Parks) to the parks system have been made over the past decade, Boone County still needs to "catch up" with its rapidly expanding population base. The Parks and Recreation Facilities Inventory included in the Parks Master Plan indicates that Boone County Parks presently contain 1,028 acres. This acreage is divided among a total of 19 facilities ranging in size from 1 acre (Oakbrook Park) to 290 acres (England-Idlewild Park). Eleven of the 19 are smaller parks of 15 acres or less. Four are Community or Special Use parks of 30-50 acres and 4 are County or Nature Parks of at least 120 acres. Presently, Boone County is investigating several other potential park sites not included in the 2000 inventory, although plans for them are not complete.

Other major recreation sites in Boone County not under the jurisdiction of the Parks Department include: 130 acres on school properties (mostly athletic fields), 525-acre Big Bone Lick State Park, 138-acre YMCA Camp Ernst, 628-acre Boy Scout Camp Michaels, 647-acre Adair Wildlife Management Area, 74-acre Boone Cliffs, and 106-acre Dinsmore Woods. Of these, Camp Ernst and Camp Michaels are not readily accessible to the general public. Of the others, only Big Bone Lick State Park has well developed facilities.

While the Parks Department currently administers 1,028 acres of parks in Boone County, only 360 of these are developed (i.e., including facilities, athletic fields, trails, etc.) acres. The Parks Master Plan recommends 10 developed acres for every 1,000 population.

Given that the 2000 population of Boone County was over 85,000, the parks system is about 490 acres short of the 850 developed acres recommended for its population. Assuming a Year 2020 population of 139,000, Boone County will need to add over 1,000 developed park acres to its current total over the next two decades. Assuming a 1:3 ratio of developed to undeveloped acres, the Parks Department is 1,500 acres shy of the 2,500 acres total park acreage it should have in 2000 and will need to add 3,000 acres to its current total of 1,028 by the Year 2020. Note that it can be argued that the 1,352 acres contained in several existing large facilities (Big Bone Lick SP, Boone Cliffs, Dinsmore Woods, and Adair WMA) fulfill some of this need, although again, these facilities have limited public access are not operated by Boone County.

To meet the deficit outlined in the preceding paragraph, the Parks Master Plan recommended the development of 18 new parks totaling nearly 500 acres. Seventeen of these facilities are parks of less than 40 acres, although a 200 acre County Park was recommended for the Walton-Verona area. It was also recommended that Central Park be increased from 121 acres to 200 acres. Note that virtually all of these recommendations focus on the creation of developed park acreage. While the plan recommended that “unique or significant natural areas of the county [be] studied and preserved,” such a study was outside the scope of the document. The plan also encouraged the development of a system of “greenways, hike and bikeways and linkages [to] connect parks, schools, playgrounds, neighborhoods, and green spaces throughout the county.” Finally, the plan recommended the creation of a conservancy to “solicit and acquire land and financial resources that can be used to implement the recommendations” (see the above discussion of The Boone Conservancy).

The Boone County Parks Department currently administers the most diverse range of recreational resources in the county, although these facilities are not yet sufficient to meet the needs of a rapidly growing county. While the 251-acre Middle Creek Park is the only large Nature Park in this system (Florence Nature park is 15 acres), the 122-acre Gunpowder Creek Nature Preserve is expected to open in 2002. Ideally, the Park’s Department should have the resources (funding and staff) to acquire and maintain a series of large nature parks like those found in neighboring Hamilton County, Ohio. A series of greenways and trails should also be developed to link the County’s recreational facilities. However, to date, no linkages have been developed and virtually all the large parks have been acquired as a result of unusual opportunities.

Boone County will probably continue to develop large parks like Gunpowder Creek Nature Park, which conserve/interpret significant natural and historic resources. Yet it is doubtful that the County will be able to fund fee simple acquisition of 3,000 acres for undeveloped parks over the next 20 years. Doing so would could cost \$9 to \$90 million, depending on the development potential of the property in question. The Boone County Parks Department will continue to be a significant part of the toolbox of land conservation in Boone County, but it is not designed to protect farmland and may never have the

resources to target specific natural areas for open space conservation. As a result, the Department is just one portion of the conservation toolbox, and is in need of additional tools to achieve public recreation objectives.

CHAPTER VI: ANALYSIS AND RELEVANCE TO BOONE COUNTY

This study reviewed seven existing PDR and TDR programs and used examples from other programs to highlight specific issues relative to PDR and TDR. A "toolbox" of other land conservation techniques was also examined and the observation made that Boone County cannot successfully protect a significant percentage of its land area without using a number of land conservation techniques. With the exception of the Town of Dunn, Wisconsin, the majority of the PDR and TDR programs reviewed focus on farmland conservation. The Advisory Group assembled for this study voiced the question: "is the goal of a land conservation program in Boone County protection of farmland, open space, or both?" Answering this question is the first step to creating a successful land conservation initiative for Boone County. The question can best be answered by the county's citizens, preferably through a community-wide visioning process. Since a county wide assessment of this type has not yet taken place, this study examines other to address the "farmland or open space" issue.

CHANGING LAND USE IN BOONE COUNTY

This section illustrates the changing land use of Boone County, which has transformed from a largely rural and agricultural community in 1950 to a rapidly suburbanizing one in 2000. The 25-year projection for Boone County includes the following: less agricultural land, less undeveloped land, more residential land, and more commercial/industrial land.

One of the factors supporting a study of PDR and TDR in Boone County is "loss of farmland," a process which has accelerated over the last three decades. From 1900 to 1969, Boone County farms encompassed somewhere between 121,000 and 151,000 acres (BCCP 2000, Table 8.2). Between 1969 and 1982, the amount of acreage in farms dropped from 126,706 to 105,390 and the number of farm acres had fallen to 79,855 by 1997. The number of acres actively farmed in Boone County (which is always somewhat less than the number of acres on farms) fell from 59,619 in 1994 to 52,214 in 1999, a change of 7,405 acres or 12.4 percent (BCCP 2000). Over that same period, residential acreage (including Rural Density, Suburban Density, High Suburban Density, and Urban Density Residential) increased from 22,427 to 25,680, a change of 3,253 acres or 14.5 percent. Commercial and business uses (including Commercial, Business Park, and Industrial) went from 6,440 acres in 1994 to 7,261 acres in 1999, an increase of 821 acres (12.7%). Taken together, residential and commercial land uses in Boone County increased 4,075 acres from 1994 to 1999 while Agricultural Land decreased 7,405 acres over the same period. While Recreational Land increased 357 acres between 1994 and 1999, it is

not an overstatement to say that Agricultural Land in Boone County is changing primarily to residential use.

The 2000 Boone County Comprehensive Plan projects changes in land use to the Year 2025. The 2000 Comp Plan reclassified many land use categories, making one to one comparisons of all categories difficult. However, gross comparisons of land use change may still be made. Generally speaking, the trend toward agricultural land reduction and increasing residential and commercial land use is expected to continue. In 1999, 122,695 of Boone County's approximately 164,000 acres (including Agricultural, Recreation, Woodland, Open Space, and Hydrology/Water) was minimally developed or undeveloped. In 2025, the total of comparable land use categories (including Rural Land, Developmentally Sensitive, Recreation, and Water) is projected to include 95,647 acres, a change of about 27,000 acres over the 25-year period. By comparison, residential (25,680 acres in 1999) and commercial (7,261 acres in 1999) land uses may increase to 43,212 and 17,006 acres, respectively, by 2025 (BCCP 2000). Despite the decline in farm acreage, a portion of Boone County's population continues to rely on farming and agricultural land still defines much of the County's rural landscape. Also, as pointed out in the Agriculture Element of the Comprehensive Plan, Boone County still ranks relatively high among Kentucky counties in terms of agricultural product.

FARMING IN BOONE COUNTY

In 1940, 6,406 (59.2%) of Boone County's 10,820 residents were living on farms (BCCP 2000, Table 8.1). Although the number of farm acres in the County remained above 120,000 until the late 1960s, only 11.9 percent of the County population was living on farms by 1970. Of the 85,072 people living in Boone County in 2000, it is estimated that only 1,100 (1.3%) were living on farms. Fewer people are living on farms today than was the case before World War II. Likewise, fewer acres in Boone County are devoted to farming today than in 1939 (79,855 acres in 1997 vs. 146,424 acres in 1939) and there were half as many farms in 1997 (691) as in 1939 (1,443), although farm size increased slightly from 101 to 116 acres over the period (Kentucky Agricultural Statistics [KAS] 1999).

Despite the dramatic decrease in farm acreage and percentage of the population living on farms, farming remains viable in Boone County. In 1999, Boone County's farm industry ranked in the upper 70 of 120 Kentucky counties in all major crop (corn, soybeans, tobacco, hay) and livestock (cattle, milk) categories except Hogs & Pigs (KAS 1999). The total agricultural receipts of about \$15 million (usually split 2/3 crops and 1/3 livestock in Boone County) has remained steady over the last 5 years. Boone County ranked 67th in Kentucky in total agricultural receipts in 1999. By comparison, Campbell (\$5.9 million) and Kenton (\$5.6 million) counties ranked 90th and 94th in 1999, respectively.

With the exception of a few large farms, Boone County's farmers largely farm on leased properties and rely heavily on tobacco quotas to sustain them in years when other crops are not successful (Western Boone County Study 1998). Farmers have indicated that it is very difficult for children of farmers or new people to begin farming in Boone County because of problems obtaining land near the parents. As a result, farm equipment cannot be shared, and other location benefits cannot be realized. With the phasing out of federal tobacco subsidies, Kentucky farmers will be faced with the reality of seeking alternatives to tobacco, which may include everything from grapes to aquaculture. While farming is not as important to the economy of Boone County as it was several decades ago, farms and farmers continue to operate. Given that farming is still a way of life for some Boone Countians, the question remains whether the focus of a PDR/TDR program should be protection of agricultural land or conservation of rural character (which benefits from farmland preservation).

Daniels (1997) recognizes that farmland conservation movements have occurred in three types of communities: (1) those with strong farming economies, (2) those where "agriculture is a remnant of its former self, and (3) places where farming either could continue to be important...or else decline into small intensive units wedged in between residential and commercial development." Development pressure in Daniels' *Strong Farming Area* is low to moderate and contiguous farms of 1000 acres remain common, although the area may be close to a metropolitan area. Daniels' *Weak Farming Area* is usually located on an urban fringe and experiences moderate to heavy development pressure. There are few large agricultural tracts left in such areas and "farm support businesses are barely adequate." Farmers in *Weak Farming Areas* have been increasingly focusing on specialty crops (e.g., vegetables and horticulture) at the expense of livestock or grains. By comparison, a *Moderate Strength Farming Area* is one where the farming community is not overly optimistic about the future of agriculture and is likely to resist land use controls, despite the fact that "farms still exist in large blocks and nonfarm development has not intruded significantly." Public officials in such areas are likely to view open space preservation, rather than farmland protection, as the primary goal. Daniels notes that the *Moderate Strength Farming Area* "presents the greatest planning challenges for public officials."

It can be argued that Boone County in 2001 features elements of both the *Weak Farming Area* and *Moderate Strength Farming Area*. While some farmers remain optimistic about farming, most recognize that it is very difficult to make a living as a farmer without having a second job and other sources of income. While some large and/or contiguous tracts of farmland remain in Boone County, agricultural land has fragmented or given way to development pressure, especially in the eastern one third of the county. Although the infrastructure necessary to support farmers (e.g., equipment sales/repair shops, feed mills, etc.) is disappearing, interest in the Ag District program is peaking. Finally, residents and their representatives do not have a clear vision of whether the conservation goal is farmland

or open space. Boone County is clearly at a crossroads, although enough local interest in the surviving agricultural base remains that it is probably worth continuing to support and protect farmers and farming. Protecting farmland also preserves rural character, which includes farmland (fields, farm complexes, etc.), woodlands, small communities, steep hillsides, narrow roads, and deeply incised streams.

BOONE COUNTY PARKS MASTER PLAN

Boone County residents have already been asked to define the county's conservation priorities, though this was done in the context of recreation. The Comprehensive Parks and Recreation Master Plan for Boone County (Parks Master Plan), completed in 2000, suggests that citizens find open space to be an important aspect of the quality of life in Boone County. During a needs analysis conducted for the Parks Master Plan, 74.7% of Family and 76% of Students identified "Open Space for the Future" as a strong need. Overall, Open Space placed third behind an Aquatic Center and Bike Trails in the Needs Analysis. To achieve open space conservation, the Parks Master Plan recommended that "unique or significant natural areas of the County be studied and preserved." The plan also recommended that Boone County "perform a study of all of the watersheds and significant natural areas in the County to determine the most desirable areas to preserve ... acquisitions could be in a variety of methods ... includ[ing] fee simple purchase, purchase of development rights, scenic easements, conservation easements, and greenway and trail easements." While the analysis conducted for the plan indicates that there may be support for land conservation, its results are not specific enough to address the "farmland or open space?" question relative to PDR and TDR. Nonetheless, the plan's recommendation to study Boone County's watersheds and natural areas could readily be expanded to include farmland and open space.

WESTERN BOONE COUNTY STUDY

A community visioning process was undertaken in 1996 and 1997 as part of the planning process for the Western Boone County Study. While a certain level of consensus was reached regarding the question of what to preserve, opinions were divided over how to preserve. The study inventoried and mapped the characteristics of Western Boone County, including topography and soils, significant natural areas and historic sites, and the nature of agricultural land and farming. The agricultural analysis revealed the importance of issues such as tobacco subsidies, leasing of farmland, automobile traffic, and increasing numbers of small farms and loss of larger farms. As for conservation strategies, some residents argued that 5-acre zoning should be increased to 15-acres, while others felt that 2 to 5 acre-zoning was restrictive enough. Concepts such as Open Space Subdivisions, purchase of key properties to block extension of public utilities, and letting the free market guide development were also discussed. The community visioning process employed for

the Western Boone County Study is the type of initiative that should be conducted on a county-wide basis as part of an effort to develop either a PDR or TDR program.

Along with an inventory of characteristics, the Western Boone County Study examined key demographic statistics and development trends. The study estimated that WBC could be built out in 70 years, assuming the following: (1) continuation of growth at the annual rate of 1 to 2 percent, and (2) unchanging property and estate taxes, septic leach requirements, zoning, and public services (i.e., water). However, it was noted that the positive visual characteristics of WBC would be compromised much earlier because development in WBC primarily occurs along road frontages, where lots are accessible and less expensive to develop than lots located away from public roads. The study made a number of recommendations to address the issue of potential future overdevelopment in WBC, including replacing the existing Cluster Subdivision Regulations with Open Space Subdivision Regulations, conducting a number of corridor studies, and developing conservation or management plans for key resources like the Middle Creek Valley and Big Bone Lick. This study was never adopted and did not propose any changes in zoning regulations or propose any new regulations. It also has not been included as part of the 2000 Boone County Comprehensive Plan.

FARMLAND OR OPEN SPACE?

The above sections suggest farming is still relevant to Boone County and that residents feel open space is one of Boone County's defining qualities. While the question of "farmland or open space" has been raised, it can be argued that working farmland is a form of open space in Boone County. Consequently, any effort to protect working farmland will also preserve open space to a certain extent. However, the rural character of Boone County is defined by more than fields and roads: rural character in Boone County is a complex formula of fields, pastures, woodlands, farmsteads, small towns like Petersburg and Belleview/McVille, steep hillsides, narrow and winding roads, and deeply incised streams. Boone County's rural character will not be preserved by an effort that focuses solely on acquiring conservation easements on farmland.

While this study views PDR/TDR as a potential piece of the puzzle, these techniques are only part of a toolbox full of techniques available to protect both farmland AND open space in Boone County. Daniels (1997) notes that "retiring development potential through PDR or TDR is attractive, but expensive" and that differential assessment and right to farm laws will not, by themselves, lead to farmland conservation. Kelsey and Lembeck (1999) agree that PDR/TDR programs "can't do it alone." The Ag District program in Boone County is well publicized and enjoys a high level of participation, although it also cannot save farmland, let alone open space, in the absence of other incentives and initiatives. Likewise, Conservation Subdivision Design may protect resources important to both the subdivision

and larger community, although "it would be a mistake to believe that sensitive site planning alone could protect a critical mass of commercially productive farmland" (Arendt 1997a).

Most of the land conservation tools discussed in Chapter V are already in use (or can be used) in Boone County. The balance of this chapter focuses on whether TDR and/or PDR can be used in Boone County and concludes that, while TDR may be appropriate in the future, a PDR program is feasible at this time.

THE "STATUS QUO" ALTERNATIVE

In the event that a PDR or TDR program is not implemented in Boone County, the toolbox of land conservation methods will be incomplete. Subdivisions at 2-3 du/ac may be developed to the edges of the river and creek valley bluffs, particularly in the Gunpowder Creek, Middle Creek, and Sand Run Creek Valleys. In addition, outlying areas will experience lower density subdivisions with lot sizes of several acres and private or public streets. Ohio River bluff areas may begin to see more single view-related homes in the Petersburg, Belleview, and Rabbit Hash areas of the river corridor with some higher density condominium development in the North Bend Road corridor. Infrastructure improvements in Boone County, including the rural water program (depending on phasing and construction specifications), may encourage more scattered, low density development throughout the county.

One result of this development will be increased fragmentation of agricultural land uses. Although the total amount of land that is transformed from agricultural to suburban land uses may not be any different with or without a PDR or TDR program, development will be more scattered in the absence of such a program. Agricultural uses will have a harder time existing due to: (1) loss of available lease land, (2) higher cost of land, (3) lack of a critical mass of agricultural area, (4) difficulty transporting equipment, and (5) increasing vandalism and nuisance complaints that arise when agricultural and residential uses are adjacent.

Another major result of this development, when combined with the extension of public water and the potential for public sanitary sewer service in some areas of rural Boone County, may affect other infrastructure, such as roads, schools, and emergency services. In particular, the roads in the rural parts of Boone County are difficult to connect because of topography and the economics of low density development. Although there is a need for housing in Boone County, residential development built in areas away from existing or planned infrastructure demands more in services than it contributes in taxes. By themselves, the Comprehensive Plan and Zoning Ordinance are not strong enough tools to address this by themselves, partly because they are politically affected processes. Boone County needs more tools in the toolbox and it needs an economic process. PDR and TDR satisfy both of these requirements, although as the balance of this chapter demonstrates, TDR is not a feasible tool at this time. Traditional planning and zoning can be a controversial and reactive

method while PDR offers a proactive, equitable, and voluntary way of attracting property owners and developers to develop in a more efficient manner in parts of Boone County.

LEGALITY OF PDR AND TDR

Kentucky's state Purchase of Development Rights program was established by the Kentucky General Assembly in 1994 and enabled by KRS 262.900 to 262.920 (see Appendix D). Kentucky's PACE program "authorizes the state [through the PACE Board of Directors] to purchase agricultural conservation easements in order to ensure that lands currently in agricultural use will continue to remain available for agriculture and not be converted to other uses" (Kentucky Department of Agriculture 2001). This legislation establishes the importance of agriculture to Kentucky, but does not enable local governments to initiate a PDR program.

Kentucky's KRS 67A840 to .850 enables urban-county governments (presently only Lexington-Fayette County) to create and administer PDR programs (see Appendix E). According to these statutes, the Kentucky General Assembly asserts that: (1) "it is a policy of the Commonwealth to retain agriculture and rural landscapes in urban counties, (2) "preservation of agriculture and rural landscapes contributes to the development of tourism and recreation" (3) "the urban-county form of government promotes industrialization and commercialization...which threatens the preservation of agriculture and rural landscapes, (4) the single government of an urban-county government is capable of distributing the benefits and financial obligations of a PDR program across its entire jurisdiction, and (5) the electorate of an urban-county government should be responsible for determining whether/how to establish and fund a PDR program. Essentially, KRS 67A840 to .850 allows only a Kentucky urban-county government to establish a PDR program, provided that this decision is made by a referendum put to the electorate. The urban-county government is also enabled to fund (again through a referendum) through taxes a PDR program. The three types of tax levies available to fund a PDR program are property taxes, license fees on "franchises, trades, occupations, and professions, and a hotel tax of up to 1 percent. Under current Kentucky law, Boone County could not establish a PDR program, as Boone County is not an urban-county government. In order to create a PDR program in Boone County, the state enabling legislation for PDR would have to be revised.

In Kentucky, KRS 100.208 allows a city, county, or urban-county government, which is part of a planning unit, to pass an ordinance permitting TDR. According to the statute, a local TDR program must: (1) provide for the "voluntary transfer of the development rights permitted on one parcel of land to another parcel of land" and (2) show sending and receiving areas on the zoning map, as either overlay zones or separate use districts. The statute also allows transfer of development rights between city and county, providing that both entities pass a TDR ordinance. While Boone County could implement a TDR program under Kentucky law, even in the absence of specific state enabling legislation, Boone County

could create a TDR program that is wholly a function of its zoning (Mittra 1996; Nelson 1998). To date, Clark County is the only Kentucky county to establish a TDR program, although no development rights have been transferred as of yet under the program, which was established in 1997.

GEOGRAPHIC ISSUES

In Boone County, as elsewhere, one of the central issues that must be considered is the extent to which a PDR or TDR program will be used. For PDR, two approaches to the “where” question have been taken. Kentucky PACE and the Lexington-Fayette County PDR avoid properties located along the urban fringe (i.e., near existing or planned infrastructure) while the Pennsylvania PACE and Town of Dunn PDR seek to protect such properties. In Boone County, the former approach is probably more practical for several reasons, although the scale of such a program in Boone County would be smaller. Politically, the County could avoid the perception that it is competing with the development community by focusing a PDR program on parts of the county that are not adjacent to existing or planned infrastructure. Such an approach makes economic sense as well, because it will cost more to acquire development rights on property that has high development potential and market value. “Leapfrog” development within the county may also be minimized if a PDR program avoids parcels located along the “urban” fringe (i.e., edge of existing development). While a PDR program in Boone County should follow existing Kentucky PDR models and employ a points system that rewards properties located away from existing development and existing or planned infrastructure, the system should be carefully designed to avoid *de facto* exclusion of all property located near existing or planned infrastructure. In this way, parcels containing sensitive natural or historic resources or prime farmland may still be eligible for the program. As stated repeatedly throughout this study, the points system created for a PDR program cannot be devised in the absence of a community visioning process.

Theoretically, TDR is a much more powerful tool than PDR because it actively encourages development around existing and planned infrastructure. However, the “where” of TDR is more complicated than PDR because answering this question involves careful consideration of existing zoning and the potential marketability of TDRs. In Boone County, determining where sending and receiving areas for a TDR should be located may be a moot point because of negative perceptions surrounding high suburban density residential development. In 1999, 13,115 acres of Boone County were covered by Rural Density Residential, and 11,014 acres were covered by Suburban Density Residential. In Boone County’s Suburban Density Residential land use classification, up to 4 du/acre are allowed, while up to 8 du/acre are permitted in the High Suburban Density Residential classification. Despite this, it is not common for actual residential development to approach these maximums. Indeed, an estimate of 1 du/acre for most Rural Density land and 2.5 du/acre for most Suburban Density land is more realistic. These densities do not even approach the

allowable zoning district densities (e.g., 4 du/acre in the geographically extensive Suburban Residential One (SR-1) zone).

While one Advisory Group member observed that a market for high density residential development has not yet emerged in Boone County, a more critical issue is that residents in existing residential subdivisions take a NIMBY approach to proposed development above 2.5 du/acre. In fact, the 2 du/acre zoning of Boone County's Rural Suburban zone was changed to 3 du/acre during the 1996 zoning update because residents were threatened by the proposed expansion of the SR-1 zone (which allows 4 du/acre) to accommodate development needs. There is a market for high density (i.e., 10 du/acre or multi-family) residential development in Boone County, although the NIMBY issue makes it difficult to develop. As discussed in Chapter V, there has also been little interest in development of clustered subdivisions. This trend will continue as long as home buyers are perceived as only being interested in large-lot suburban residential living.

WHY PDR RATHER THAN TDR?

The above paragraphs suggest that it would be very difficult to create a market for TDR in Boone County, because public perception and the private market are presently working against moderate to high density residential development. Even commercial and industrial development in Boone County seldom reaches maximum intensity allowed under current zoning. For this reason, a residential to commercial TDR transfer, whereby bonus square footage is permitted through use of TDRs, would probably not be successful in Boone County. Of course, a market for high density development could be created by making it very difficult (through rezoning) to build low to moderate density residential throughout much of the county. However, this would be politically contentious and could adversely affect the development market in Boone County. For these reasons, a TDR program is not feasible in Boone County at this time. The possibility of developing a TDR program for Boone County should be re-evaluated as part of comprehensive plan updates that must occur every five years.

While a TDR program does not appear to be feasible at this time, it is noted above that Boone County does not yet possess a complete "toolbox" of land conservation tools. This study concludes that a PDR program is a feasible addition to the toolbox of land conservation tools in Boone County. The geography of PDR has already been addressed. Other issues, including funding, staffing, and implementation are discussed below.

SCOPE OF A FEASIBLE PDR PROGRAM IN BOONE COUNTY

It is important to stress that PDR is not a land conservation “cure all.” Rather, it is one of a number of techniques in the “toolbox,” each of which has its own niche. Differential Assessment of agricultural land affects more acreage in Boone County than any other technique, yet makes it possible for farmers to own land by reducing their tax burden. By comparison, while The Boone Conservancy has yet to protect a single acre in Boone County, it serves a purpose not met by any of the other tools. Had it been in place a few years earlier, The Boone Conservancy would have been an ideal steward for several large parcels (e.g., Brunings Farm, Adair WMA, Boone Cliffs) that were instead donated to other organizations. Likewise, as argued in Chapter V, PDR fills a niche in the toolbox which is not filled by any of the other tools.

In addition to the extent of PDR, which would be relatively small in Boone County for cost reasons, several other issues are related to the practicality of PDR. It is argued that PDR in Boone County should be used to conserve both farmland and open space. While a PDR program could be set up to accept applications from owners of tracts that are primarily farmland or primarily open space (e.g., a portion of the Gunpowder Creek Valley). An alternative approach that might make sense in Boone County is a dual-track PDR, similar to the one maintained by the Vermont Housing and Conservation Board (VHCB). The VHCB accepts applications from farmers and establishes conservation easements on farmland under one program and seeks conservation of natural areas and historic and archaeological sites under another. These are technically separate programs with separate application criteria and separate levels of funding, although they are both administered by VHCB from the same funding sources. This dual track concept could be employed at the county level in a PDR program for Boone County. The two tracks (e.g., Ag Land and Natural Areas) would have their own evaluation criteria and points systems and conservation easements. They could also have separate funding levels, which would allow tighter control of the use of public funds and grant dollars used for PDR, as well as accurately reflect the values of Boone County citizens and land owners.

The dual track concept offers an opportunity regarding public use of conservation easement areas. Typically, there is no provision for public access to land protected by conservation easements in PDR programs. Obviously, it does not make sense to allow public access to actively farmed land. However, the expenditure of public funds for the purpose of land protection is more easily justified if public access to natural areas is permitted. The Montana Agricultural Heritage Commission allows public access to easement protected properties, although agreeable landowners may receive extra compensation. Under the dual track PDR program described above, it would make sense to make public access a requirement for easements established for the Natural Areas track. Of course, the extent of public access allowable under the easement would have to be defined. Most likely, this would include passive recreation like hiking (or perhaps horseback riding) in designated areas, rather than active recreation (e.g., soccer or baseball). The details of a dual track PDR with provision for public access would need to be determined through the public visioning process.

The scope of a PDR program for Boone County is a function of the niche it must fill to complement the other tools in the toolbox. Without conducting a community visioning process to identify key conservation areas, it is difficult to define the actual size a PDR program needs to be in Boone County. Lexington-Fayette County, as an example, determined that their PDR program should acquire conservation easements over 40,000 to 50,000 acres over the next 25 years. In Boone County, where even the most rugged and least buildable land is worth \$1,500 acre, the value of development rights in Boone County might amount to anywhere from \$1,000 to \$20,000 (for level land adjacent to utilities) or more per acre, depending on location and infrastructure. Clearly, it would not be feasible to purchase development rights over 50,000 acres at a cost of up to \$1 billion, even if acquisition was phased over 25 years. To be feasible, a PDR program in Boone County would have to be much smaller in scope than the Lexington-Fayette County PDR.

Cost alone dictates that it is not feasible to expect PDR to protect 40,000 to 50,000 acres in Boone County. Without asking the community to define its own conservation needs, an estimated size of a PDR program in Boone County is tenuous. Hypothetically, two “niches” suggested in Chapter V are possible starting points, including the 7,800 acres contained in existing Ag Districts and the 3,000 acres in undeveloped (i.e., natural) park areas needed by the Year 2020. If for some reason a community wide assessment is never conducted, a PDR program in Boone County could seek to target these niches and acquire conservation easements within these 11,000 acres. Even if Ag District participation doubles to 15,600 acres and Boone Countians decide through a visioning process that they want 5,000 acres of natural areas preserved, the total would still be little more than 20,000 acres, which is less than half the size of the Lexington-Fayette County PDR. Other hypothetical niches that a PDR program could focus on include the approximately 1,300 acres of historic agricultural land of the North Bend area along River Road and the over 1,600 acres of farmland in East Bend Bottoms.

High land costs in Boone County still dictate that a PDR program would have to follow a prescribed plan and be very strategic in its pursuit of conservation easements. Such a strategic approach could be to use PDR to help build the system of greenways recommended in the 2000 Parks Master Plan to connect existing and future parks and recreation areas. A haphazard approach would simply not be cost effective. For PDR to work in Boone County, a points system that favors properties which are not adjacent to public services would need to be considered. Such properties have less economic development potential than those along the urban fringe. Although the concept has become less popular in recent years, a per-acre cost “cap” could also be employed.

Requiring Ag District participation as a prerequisite would limit the pool of potential applicants and encourage applications from committed farmers in the most viable agricultural areas. Also note that the 3,000-5,000 acres of natural areas in the above scenarios are likely to have relatively low development potential and correspondingly lower property values.

Within the above parameters, the hypothetical “size” of a feasible PDR in Boone County might be estimated as follows:

Farmland

Assuming a per-acre cap of \$10,000/acre on agricultural land, acquisition of the development rights on 7,800 acres of farmland would cost \$78 million on the aggressive side. Currently, some of the best farmland in the county can still be bought in fee simple for \$5,000 to \$8,000 an acre, so \$10,000 an acre for development rights is an inflated figure. 7,800 acres is slightly larger than the amount of land currently owned by the Cincinnati/Northern Kentucky International Airport.

Natural Areas

Assuming that the development rights of natural areas cost \$1,000 to \$3,000 an acre, it would cost \$3 to \$9 million to preserve 3,000 acres. By comparison, the 2025 Boone County Future Land Use Map contains 42,795 acres of Developmentally Sensitive classification.

The above scenario is obviously more aggressive on agricultural issues than on green space issues, however, it must be stressed that these issues should be decided by the community through a visioning process. Based on these assumptions, the cost of a PDR program in Boone County would be about twice the \$40 million in funding already available for Lexington-Fayette County’s program. A Boone County program could ultimately be about 1/5th of what it might cost to fund a PDR program the size of Lexington-Fayette County’s program.

FUNDING A PDR PROGRAM

As discussed in Chapters III and IV, funding is more of an issue for a PDR program than a TDR and, since PDR is feasible in Boone County, this section focuses on how a PDR program could be funded. It is worth noting that, nationwide, public support for funding of initiatives like PDR is extremely high at this time. The various funding mechanisms employed by PDR programs around the nation are evaluated in Broward County, Florida’s, PDR feasibility study (see Broward County Planning 2000, Table 3.4 in Appendix E). Most of the descriptions presented here about particular funding approaches are adapted from that report.

Many PDR programs receive a substantial portion of their funding through **General Obligation Bonds**, which can initially infuse large sums of money into a program. However, interest on such bonds increases the total cost of the program and the taxes or other county funds used to repay the bonds may be politically unpopular. Lexington-Fayette County approved a \$25 million dollar bond as initial funding (in addition to a \$15 million tobacco

settlement grant) for its PDR program; the bond will be paid off with a \$2 million annual appropriation from the urban-county government's general funds.

Annual General Fund or Budget Reserve Appropriations are a good source when the local economy is doing well, but are not a reliable sole source of continued funding for a PDR program. Annual appropriations are, however, an ideal source of matching funds for grants.

Local Sales Taxes take advantage of both resident and tourist dollars and are probably the best source of long-term funding for a PDR program. However, such taxes are regressive, as unpopular as property taxes, and require extensive public support. More importantly, Kentucky law does not provide for local sales taxes so implementing their use would require a change of state law.

Local Real Estate Transfer Taxes can also supply long term funding for a PDR program in some states. However, Kentucky state law prohibits this form of taxation.

Dedicated Local Property Taxes are another reliable potential long term funding source which may be implemented through a referendum. However, like other local taxes, property tax levies require a good deal of public education and campaigning to pass. Further, this type of tax may not infuse a PDR program with sufficient "start up" money.

Local Use Taxes (e.g., Cellular Phone, Car Rental Taxes) are capable of providing a steady stream of continuing funding to a PDR program but are likely to be unpopular. Currently, economic development in Northern Kentucky is funded by a car rental tax.

Hotel Room Tax or Occupational Taxes are two funding options (in addition to property taxes) available for Kentucky urban county governments for funding of a PDR program. Both taxes have the potential to provide a long-term flow in funds to a PDR program, although Hotel Room Taxes in Kentucky are typically earmarked for funding of tourism initiatives and their use for PDR may be problematic.

The **Federal Farmland Protection Program** has been critical to small PDR programs like the Town of Dunn, where huge sums of money are not required to achieve positive results. However, FPP funds are competitive and cannot be counted on as a long-term funding source. Boone County should regularly compete for FPP funding through the USDA, although the FPP should not be construed as a source of regular and continued funding.

Private Donations are ideal for non-profit organizations like The Boone Conservancy, which received a \$50,000 grant from Toyota. However, such corporate sponsorships are rare. Family endowments are probably a better source of grant funds for a land protection program, although it may be very difficult to locate potential endowments.

Tobacco Settlement Grants from the Kentucky Agricultural Development Board may be the single most promising source of support and funding for a county-level PDR program in Kentucky. The Farmland Preservation Committee of the Kentucky Agricultural Development Board (KADB) has already allocated \$10 million to Kentucky PACE and \$15 million to the Lexington-Fayette County PDR program. Over the next 25 years, the Farmland Preservation Committee will continue to allocate funds for PDR and has passed a resolution which states that “subsequent” PDR initiatives are eligible for funding from the Kentucky Tobacco Settlement on a 1:1 matching basis. In awarding \$10 million to Kentucky PACE, the Farmland Preservation Committee stipulated that the PACE Board “extend support to local PDR initiatives established by local ordinance,” although the nature of this support is not specified. The resolution also states that the “Fayette County PDR plan be used by the Kentucky PACE Board as an initial model for local PDR initiatives” and that the PACE board is “responsible for statewide oversight of local PDR initiatives.” Again, the ramifications of this resolution are not entirely clear, although it is evident that the tobacco settlement may become very valuable, in terms of support and funding, for a county-level PDR program. During the study process, one Advisory Group member observed, “if we don’t have a PDR program set up, we WILL NOT get any tobacco settlement money set aside for PDR.”

For the present, the best way to fund a PDR program in Boone County is to maximize the leveraging potential of Kentucky Tobacco Settlement funds. In a May 25, 2001, presentation before the Kentucky Chapter of the American Planning Association, John-Mark Hack, Executive Director of the KADB, stated that “we’re making this up as we go along.” Mr. Hack inferred that Kentucky is exploring new territory as the federal tobacco subsidy is phased out, and that Kentucky is still working on the direction it will take in the wake of this momentous agricultural change. In addition to promoting and funding value added agricultural industries in Kentucky, the KADB has made it clear that active funding of farmland conservation efforts in the Commonwealth will be a priority over the coming decades. It is very likely that additional funds for PDR programs in Kentucky will be made available in future funding cycles, although the level of available funding is not yet known. Regardless, if Boone County intends to pursue a PDR program, the availability of funds from the tobacco settlement may be key. “Kick-off” funding for a Boone County PDR could come from a bond issue, assuming that there is sufficient promotion and public outreach to support the issue. The county might also consider allocating a portion of general funds to a PDR program, especially while the local economy is strong. Establishing a pool of locally generated funds will be essential for leveraging the state grant funds which will come from the tobacco settlement over the next few years.

STAFFING AND ADMINISTERING A PDR PROGRAM

Most PDR programs are administered jointly by a board of appointees and a professional staff, an approach that makes sense for a small program like one that could operate in Boone County. A PDR program in Boone County would require at least one full time staff position. To maximize the existing staff expertise in the area of PDR, this position would logically reside within the Planning Commission staff. At first, the person hired for this position would focus on educating the public and promoting the program. This position would also work with an appointed PDR board to develop a LESA points system to reflect the results of a community visioning process, which will form the basis of the program's the conservation goals. This initial staff position would also seek grant funds through sources mentioned above (e.g., KADB, FPP) and work to identify other potential sources of funding. Once funding for easement acquisition is secured and a LESA points system created, this staff person would begin the process of soliciting and applications from Boone Countians interested in the program. Depending on the initial success of the program, an additional staff person may be required to handle the work-load. Although paid staff is a significant expenditure, it is better to have enough staff to handle the workload than to face a situation like that of the Town of Dunn PDR, which despite demand, cannot spend funding fast enough due to insufficient staffing.

The Rural Land Management Board (Rural Land Board) created for the Lexington-Fayette County PDR program is set up in a manner where it could serve as a model for the Boone County PDR board. The Rural Land Board is an agency of the Urban-County Government and is made up of 13 members, 11 of whom are voting members, and two of whom are ex officio non-voting members. The 11 members must have "demonstrated an interest in farming, farmland preservation, conservation of natural areas, or other agriculture, rural, and natural lands conservation and management issues" and were appointed by the mayor, subject to confirmation by a majority of the council. The 11 members include representatives suggested by the following groups: Fayette County Farm Bureau, Kentucky Thoroughbred Association, Homebuilders Association of Lexington, Lexington-Bluegrass Association of Realtors, Greater Lexington Convention and Visitors Bureau, Fayette County Neighborhood Council, private non-profit organizations involved in land conservation, government entities or private nonprofit organizations involved in historic preservation, and the Greater Lexington Chamber of Commerce. The two non-voting members hold the positions of Fayette County Extension Agent and District Conservationist appointed by Natural Resource Conservation Service of the U.S. Department of Agriculture.

The Rural Land Board is responsible for: (1) reviewing applications from landowners who want to sell conservation easements; (2) establishing procedures for acquisition of conservation easements and other interests in rural land, including donations, (3) deciding upon circumstances in which a landowner may be released from an easement that becomes part of the urban service area (due to a change in the urban service boundary), (4) establishing procedures for release of easement on property within the rural service area, and (5) indicating that the planning commission will, at each 5-year update of the

comprehensive plan, consider all matters of property under easement that may be included within the urban service area.

With obvious exceptions, such as the fact that Boone County has neither a thoroughbred association nor an urban/rural services area, a PDR board for Boone County could have a very similar composition and duties. The groups represented by the Advisory Group established for this study reflect the range of interests that ought to be represented on a PDR board established for the Boone County PDR. While a private, non-profit such as The Boone Conservancy could technically hold the county's PDR easements, this may create a conflict of interest between public and private realms. Therefore, the county PDR board should be responsible for holding and administering any easements secured by the program.

IMPLEMENTING A PDR PROGRAM

Implementing a PDR program in Boone County would be a multi-phased process and would take at least three years. The first step is lobbying to amend KRS 67A.840 to .850 so that county governments in Kentucky may establish PDR programs. While this process is underway, an education and publicity campaign could explain the concept of PDR to the public and generate support for the lobbying effort. During this phase, a public opinion poll and cost of community services study or growth trends analysis should help build support for a PDR program by helping the public to understand the issues involved. At least 1 year should be allowed for this first phase, the primary purpose of which will be to garner support for a referendum that will allow voters to decide whether Boone County creates a PDR program.

Assuming the electorate approves creation of a PDR program, the next phase (3 months) should include establishment of the appointed PDR board described above and securing of initial funding for a staff position. The PDR board and Planning Commission should fill the full-time staff position as soon as funding permits.

Following the first 2 phases (15 months into the implementation process), the staff and PDR board should be in place and beginning a community visioning process, which will expand the outreach program begun during the first phase of planning. The visioning process should include facilitated focus groups for various parts of the county, town meetings, and other information sessions similar to those carried out for a zoning or comprehensive plan update. The purpose of the visioning process will be to accurately establish the conservation goals of the community. The visioning process should result in the creation of a summary report and map of key conservation priorities including agricultural lands, historic sites, open spaces, scenic views, habitat, etc. During this time, the staff and PDR board will seek outside funding, begin working on a LESA points system, and begin developing the paperwork that will be necessary for the program (i.e., application forms,

model easements, etc.). Completion of Phase 3 (15 months) should also result in an estimate of the target acreage and timetable for the PDR program. Lexington-Fayette County's visioning process established that 40,000-50,000 acres of the remaining 125,000 undeveloped farm acreage in the county should be preserved by PDR. Since the results of Boone County's visioning process may be quite different, it is not possible to say in advance how much of the county might be protected through PDR.

The LESA points system and PDR paperwork will be finalized during Phase 4 (3 months) of the process as will establishment of an initial pool of funds needed to purchase development rights. Following the first 18 months of implementation, the program should be ready to begin soliciting and accepting applications from landowners interested in selling development rights. This final phase may take several months and should be marked by the first formal PDR accepted by the program. Thereafter, the program should consist of continued cycles of fund raising, application evaluation, and program monitoring. The PDR program should be evaluated every 5-years as part of the required comprehensive plan update.

SUMMARY OF 3-YEAR PDR IMPLEMENTATION PROCESS (see Figure 3):

Phase 1 (12 months): change enabling legislation, initial public education and support building, seek financial alternatives;

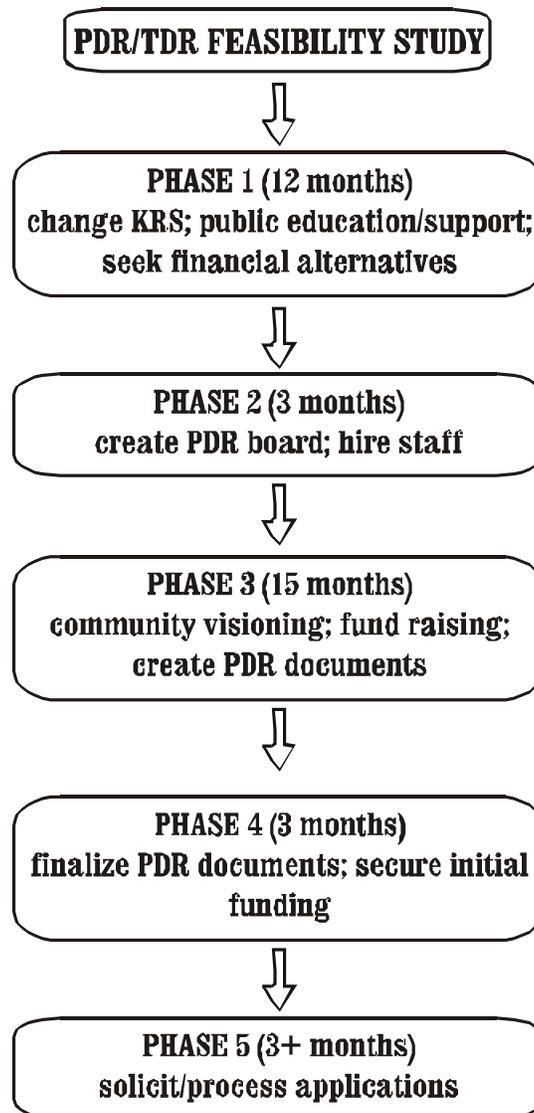
Phase 2 (3 months, once financial commitments are secure): create PDR board, hire staff;

Phase 3 (15 months, after staff and board in place): community visioning process culminating in report and resources map, fund raising, begin developing LESA system and paperwork for program;

Phase 4 (3 months): finalize LESA system and program paperwork, secure initial pool of funds

Phase 5 (3+ months): solicit and begin processing applications

FIGURE 3: IMPLEMENTING A PDR PROGRAM IN BOONE COUNTY



PDR/TDR ADVISORY GROUP CONCERNS

As discussed in Chapter I, the PDR/TDR Advisory Group was created as a sounding board to reflect the interests of a number of groups in Boone County. The Advisory Group was brought together five times during the study process and the comments addressed here reflect concerns expressed during that process. Written comments received from Advisory Group members are included in Appendix A. Legitimate questions/issues raised by Advisory Group members are discussed here in question-answer format below:

Won't a PDR program created in Boone County force development to leapfrog to the next county (e.g., Grant or Gallatin)?

This phenomenon has been observed in parts of the country (e.g., Montgomery County, Maryland) where development pressures are very high and land use controls are stringent. To some extent, these conditions have pushed development beyond Montgomery County (which maintains both a TDR program and PDR program) and into neighboring counties. As discussed above, the market in Boone County is not currently strong enough to warrant a TDR program and stringent land use controls like those used in Montgomery County are probably not politically or economically feasible in Boone County. Also, the 2000 Boone County Comprehensive Plan projects that there is ample land available to accommodate development in Boone County over the next 25 years, even if most of the rural parts of Boone County remain as they are today. None of the counties adjacent to Boone County benefit from the presence of a major international airport and three interstate highways. Finally, a PDR program in Boone County should be designed to avoid "competition" with developers by targeting parts of the county which do not benefit from existing or planned infrastructure. For these reasons, it is extremely unlikely that a PDR program in Boone County would lead to leapfrog development in adjacent counties. If development proceeds more into Grant and Gallatin Counties, then it will likely be a result of the presence of I-75 and I-71 and favorable topography more than any land use tool like a PDR program.

A PDR program can't work unless landowners are willing to sell their development rights. This is correct, which is why a 30-month process including a year of initial education/outreach and extensive community visioning process should precede acceptance of any applications for a PDR program in Boone County.

In 1997, the Supreme Court ruled that TDRs are illegal.

This is incorrect. While the legality of TDR was raised in *Suitum v. Tahoe Regional Planning Agency*, the question was not answered by the Supreme Court, which remanded the case to a lower court. The two parties subsequently settled out of court. TDR remains a legal extension of a community's zoning authority.

"PDR is the only way to guarantee, in a fair way, green space in Boone County for the future. TDR makes zoning boards TOO powerful and is not a fair, easy way to purchase development rights."

This report indicates that, at this time, PDR is a feasible addition to the "toolbox" of land conservation techniques that may "guarantee future green space in Boone County." TDR does not presently appear to be an appropriate tool for Boone County.

TDR has been "on the books" in Kentucky for 11 years but has not been successfully used...due to the lack of demand for high density housing.

In Kentucky, only Clark County has established a TDR program, and no transfer of development rights has occurred under that program. Observations presented in this report

suggest that a lack of demand for high density housing is probably less of an impediment for a TDR than NIMBY responses to perceptions about high density housing.

Only urban-county governments can set up and fund a PDR program through taxes under Kentucky law.

Correct. This is why the first step in the implementation process for PDR in Boone County will be to lobby for amendment of KRS 67A.840 to .850.

"It was speculated that no new tax dollars were proposed by the [Lexington-Fayette] Urban County Government due to the fact that a silent poll indicated that the taxes proposed would not pass in a referendum. It has also been speculated that \$40 million is not enough to fund the 50,000 acres [the targeted goal of the PDR program] and that a tax increase is inevitable should the program continue toward the goal set by the Lexington/Fayette Urban County Government. I'm not sure the residents of Boone County would want that." This report indicates that Boone County residents would need to be given the chance to approve both the creation and funding of a PDR program to avoid "speculation" of this sort.

Regarding the Pennsylvania PACE program: "The \$143 million dollars doesn't seem to be a lot of money for a state that is 114,817 square miles in land mass. And the 186,000 acres preserved is miniscule in comparison to the total land mass. Compare this with the \$40 million currently in place in Fayette County with a goal to purchase 50,000 acres out of a total land mass of 285 square miles.

The visioning process conducted for the Lexington-Fayette PDR program concluded that 40,000 to 50,000 acres (of the approximately 125,000 acres of farmland) was the "critical mass" necessary to make farming viable in that county. \$40 million dollars may not be sufficient to acquire conservation easements on 40,000 to 50,000 acres. If not, the voters in Lexington-Fayette county will have to decide whether PDR is worth funding.

"Will the taxpayers be burdened with the cost of preserving farmland that they cannot use for recreational or other purposes? If so will there have to be a referendum to get approval?"

Unless Kentucky law changes dramatically, any tax proposed to fund a PDR program in Boone County would require a voter referendum. If taxes are needed to fund a PDR program, voters will have to decide whether they want to support the county's farming industry and preserve the rural character that has defined Boone County for centuries or continue to pay for infrastructure (e.g., roads, sewers, schools).

"What is the true cost to the farmer to take his land from the sale for development for at least 25 years if not eternity?"

According to a recent survey and analysis, 85 percent of surveyed farmers participating in the Massachusetts Farmland Protection Program are satisfied with the program and 92 percent said that they would be likely to participate again (Sherman et al. 1998). In a similar

study of Vermont's PACE program, 97 percent of farmers polled indicated satisfaction with the program (Ferguson and Cosgrove 1999). In both studies, about 75 percent of participants stated that they wanted to preserve their farmland for future generations. Participation in a PDR program in Boone County would be voluntary and would respect the desires landowners who may or may not be interested in selling their development rights.

"These conservation easements are forever."

"What happens to the farmers' descendants when and if they decide not to farm and cannot sell the land for any other purpose?"

As discussed in this report, a buy-back clause is a necessary component of a feasible PDR program for Boone County. This would give future generations the option to buy back the development rights sold by an ancestor.

"Many property owners in our county oppose these programs because they constitute increased government control over the land. These taxpayers understand further that they will be plundered to pay for these schemes. I also agree with the many who point out that these government programs are stealing the rights of future generations by placing permanent use restrictions on land and recording these restrictions on the deed...do we really have the wisdom to make decisions for all future generations?"

Rather than address unbiased evaluations of how Boone County residents feel about PDR, this report suggests that residents decide for themselves whether a PDR program is implemented in Boone County. Residents should also be asked whether taxes are used to pay for such a program. Again, a PDR program in Boone County would be voluntary and every landowner would have the right to decide whether to participate.

CHAPTER VII: CONCLUSIONS

At the request of Boone County Fiscal Court, this study was conducted to evaluate how Purchase of Development Rights (PDR) and Transfer of Development Rights (TDR) programs have been used by other communities and to determine whether either technique may be feasible in Boone County. The characteristics of both PDR and TDR were explored at length using detailed case studies and data from current literature on the subject. Important issues and necessary implementation steps for both techniques were discussed in general terms. A "toolbox" of other land conservation techniques was also examined. This research was then assessed relative to Boone County. Together, data from existing PDR and TDR programs, a review of current literature, and an analysis of Boone County lead to the following conclusions:

- C This study suggests that land conservation in Boone County concerns both farmland AND open space;
- C Conservation of both farmland and open space requires utilization of the entire "toolbox" of land conservation techniques presented in this study;
- C At this time, Transfer of Development Rights is not a feasible land conservation tool for Boone County;
- C Purchase of Development Rights is currently a feasible addition the existing tools in Boone County's toolbox of land conservation techniques;
- C The residents of Boone County must be involved in determining whether a PDR program is established and how it is funded;
- C To achieve success, a PDR program will require phased implementation over a minimum 3-year period;
- C Implementation of a PDR program in Boone County would require: amending Kentucky law, extensive public education/outreach, a community visioning process and county-wide open space plan/map, formation of a PDR board, development of funding sources, and creation of at least one full-time staff position.

This study was initiated to evaluate both PDR and TDR. The results of the study indicate that PDR is a workable tool for Boone County at this time. However, it is important to stress that PDR is only one of a number of tools designed to preserve open space and

make farming viable. Some tools (PDR, Ag Districts, differential assessment for taxes) help make farming more lucrative. Others (zoning and Conservation Subdivision Design) encourage orderly and cost-effective growth in Boone County by concentrating development near existing or planned infrastructure and affecting the physical design of development. Still other tools (PDR, The Boone Conservancy) have the potential protect farmland and preserve key open space elements of Boone County's quality of life that make the community an attractive place in which to live and work. While PDR by itself cannot bring about planned growth, the use of the entire "toolbox" of land conservation techniques is a "smart growth" approach that promotes development around existing/planned infrastructure.

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