Transfer of Development Rights: A Feasibility Study for Skagit County, Washington

TDR Summary & Literature Review
Phase 1 and Phase 2 and Phase 3 (partial)

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Introduction

Even though there are thousands of documents about transfer of development rights, these articles and papers provide little guidance for measuring the effectiveness of this much-touted approach to land use management. There is little analysis, if any, comparing the various approaches to implementation of the programs or standards for "incentivizing" the programs to encourage participation. The typical measure of evaluation for these programs has been either to quantify the number of acres "protected" (not all TDR programs provide permanent protection for the sending sites) or the number of transactions completed.

There are three main types of reference on TDR: academic, advocacy and instructional. A high percentage of the work available comes from the academic arena, both student research and academic studies.

Little analysis is available from conservation practitioners, although several papers soon to be released may shed more light on how effective an approach TDR has been in reaching the stated goals of the programs. The Maryland Center for Agro-Ecology will be releasing a feasibility study for TDR programs on the Eastern Shore of Maryland and Resources for the Future will be releasing further analytical analyses on programs in New Jersey.

There are a number of ways that outcomes can be analyzed but the bulk of the analysis available is narrowed only to looking at the few programs that have "protected" the most acres. Unfortunately, the typical analysis has looked at a program in isolation from its context – comprehensive plan, zoning, growth rates, etc. – and reports about successes are tied only to number of trades or acres under easement.

In measuring whether a TDR program has achieved its stated goals – or outcome – one must reference the program documents, so simply reporting the number of acres or transactions ignores any qualitative measures which might give more information about program effectiveness.

There are a number of issues which are repeated throughout the body of literature. These include:

- Public support for the program
- Balanced sending and receiving areas
- A robust real estate market able to absorb additional development rights profitably

- Strong comprehensive plan and zoning that support a TDR approach
- Political will
- TDR is as easy to use as other, traditional applications for development

There are variances in the details of programs that require localities to choose an approach:

- Voluntary versus mandatory program
- The incentive for sellers
- The incentive for buyers
- Strictly private process or semi-public
- Type of covenant, deed restriction or easement to secure the sending site
- Single or multiple sending and receiving areas

There is a lack of consistency in the use of terms describing TDR programs. There is a level of confusion inherent in some of the basic technical terminology like “voluntary,” “mandatory,” and “incentive.” A voluntary program is one that does not utilize a blanket down-zoning in the sending areas, whereas a mandatory program down-zones all properties in the sending area regardless of program participation. The “incentive” in the mandatory program is the ability to recoup some of the value of the development rights through sale of those rights while the incentive for a developer may be a bonus density increase for using the program.

Many times, land use policies are described in terms of “the carrot and stick.” The carrot is an incentive, or encouragement, to do something. The stick would be a disincentive or deterrent for certain behavior. Consistently across the TDR literature, though, we find that deterrents are labeled as “incentives.” This may lead to cynical public opinions of and/or resistance by landowners to proposed TDR programs.

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ABSTRACT *TDR programs are variously described as a solution to regulatory property rights issues, market-driven growth management approach, an historic preservation technique, and a natural resource preservation strategy. A large body of work describes how to design TDR programs, but only limited analysis has been completed assessing how effectively TDR has met stated program goals. This paper uses a case study approach to: (1) identify TDR program elements and characteristics; (2) review the existing literature related to TDR program analyses; and (3) develop recommendations for further consideration in the development of an expanded land conservation strategy for Skagit County, Washington. Any new approach must work in harmony with the current farmland purchase of development rights program, rural and urban policies, and land use pressures.*

Overview of TDR

Transfer of development rights (TDR) is based upon the premise that development rights are part of the bundle of rights making up fee simple land ownership, and that these rights can be severed from the land. TDR programs allow landowners to sever specific development rights from their properties and to transfer those rights to other parcels and/or owners. With a few exceptions, the transfer is typically done through a locally promoted TDR program.

TDR was first introduced in New York City almost a century ago when a zoning ordinance allowed for air rights to be transferred to adjacent parcels to with the intent of preserving landmark buildings and neighborhood character. In recent years, the City has begun using transfer of development rights to encourage redevelopment projects and to raise funds for municipal agencies holding properties that would otherwise have great development potential (Bagli 2006). Non-profits and churches in particular, are looking at this technique as a way to raise needed capital (Eckstrom 2006).

Transfer of development rights is defined as, "an implementation tool that encourages the voluntary transfer of development from places that communities want to save, called sending areas, to places that communities want to grow, called receiving areas," by Rick Pruetz in the most recent edition of <u>Beyond Takings and Givings: Saving Natural Areas, Farmland and Historic Landmarks with Transfer of Development Rights and Density Transfer Charges</u> (Pruetz 1997).

In 2000, there were 142 adopted TDR programs throughout 31 states and Washington, D.C. according to Pruetz. He ascribes 30 purposes of these programs. From the initial implementation in urban settings, TDR has also been applied to:

- protect environmental values on natural resource lands,
- protect historic properties and settings,
- preserve water quality,
- protect aquifer recharge areas,
- provide recreational opportunities,
- conserve farmland,
- retain hillside viewsheds,
- to assure infrastructure capacity,
- to encourage urban redevelopment,
- to retire substandard lots, and
- to preserve wetlands.

A legal memorandum from a former New York State Attorney General characterizes TDR as “a land use regulation technique which can let a municipality have its cake and eat it too.” The memo concludes that there are three primary benefits to TDR:

- it permits preservation of lands where further development is undesirable for a variety of reasons;
- it does so without loss of new development to the community; and
- it does so without depriving landowners of a reasonable economic return on their property (Shaffer 2005).

In general, TDR success remains illusive for rural programs. A majority of adopted programs have not been implemented or have completed very few transfers due to a variety of impediments. Some programs have been formally abandoned due to a lack of interest and participation.

The most successful rural, or farmland TDR programs are administered as the primary land conservation approach in the locality, supported by other programs and policies. Typically, more acres have been protected through TDR than all other approaches combined. To sustain a program, a locality must have a robust rate of development.

History - Implementation

TDR programs in New York City; Calvert County, Maryland; and Collier County, Florida are described as “first generation programs” in a paper which proposes a framework for evaluating programs. These programs were adopted in the 1960’s and 1970’s (Machemer 2002). While these three programs differ in the character of the program goals and implementation, one common factor is that all have been amended and adapted to meet new and changing market demands, and to encourage utilization of the program.

New York’s program has expanded the transferability over time, creating larger and new designated transfer districts. Recently, the City has initiated transfers to support targeted redevelopment and to channel funds to specific agencies holding properties and parcels with significant development potential. Calvert County has implemented three comprehensive, county-wide down-zonings to make the TDR program more attractive and to ensure that it is meeting the county’s land use goals. Collier County changed the incentive structure and developed a detailed plan with detailed implementation strategies that require the utilization of TDR to build out to the plan.

According to Machemer, the “second generation” of programs were adopted and implemented in the 1980’s, include the New Jersey Pinelands; Denver, Colorado; and Pittsburgh, Pennsylvania. The Pinelands is the first regional program and has an element of Congressional input that other programs lack; in 1978, the region was designated the first National Reserve in America and the region was charged with adopting a Reserve Plan within eighteen months. The urban programs built upon the first generation programs and the lessons learned from their implementation.

The 1990’s saw more programs adopted, including the Montgomery County, Maryland, program which is held up as the “most successful farmland preservation TDR program in the country. Montgomery has transferred development rights from over 40,000 acres in its 110,000 acre Agricultural Reserve. Montgomery left a residual residential density of 20% on each parcel transferring rights; this means there are about 1,800 potential additional units that are allowed in the protected areas of the Agricultural Reserve which the County is currently studying. (Pruetz 2003).

Programs continue to be adopted throughout the country for varying, and sometimes, multiple purposes. In 2000, there were 142 adopted TDR programs throughout 31 states and Washington, D.C. according to Pruetz. Implementation continues to lag well behind adoption, and we can now also assess abandoned and discontinued programs throughout the country.

There is a continuing focus on this “planning or growth management tool” in the professional planning community; presentations advocating TDR are offered at almost every major planning forum. TDR may be better viewed as a *tactic* that can be implemented to achieve specific community land use goals, whether land preservation or neighborhood redevelopment.

One question a community must answer is whether the local economy can absorb and support a newly created market in development rights. The market, or developers, must be able to utilize TDRs faster and cheaper than other approaches, or the TDR program will remain idle (Boyd 2003).

History – Legal Challenges

The idea of transferring development rights was first formalized in New York City in 1916 where a zoning ordinance allowed lot owners to sell unused air rights to adjacent lots. In 1968, New York City expanded the transfer program by allowing sale of development rights to certain non-contiguous parcels; this accommodation was made to reduce the financial hardships imposed by the historic landmark regulation.

The first court case to speak to TDR examined New York City's limitation of development on two privately held parcels. The City rezoned the parcel to park use to prevent construction of apartment buildings but allowed for the transfer of the unused development rights to other Manhattan parcels larger than 30,000 square feet. The owner sued on the grounds that this was a taking without compensation. The court agreed but did uphold the legality of TDR [Fred R French Investing Company, Inc. v. City of New York, 39 N.Y.2d 587, 385 NY2d 5 (1976)].

The owners of Grand Central Terminal challenged the historic landmark regulation as a taking of private property. This challenge rose to the level of The U.S. Supreme Court. The court found that transferable rights "undoubtedly mitigate whatever financial burdens the law has imposed…" but did not rule on the validity of TDR itself. [Penn Central Transportation Company v. New York City, 438 U.S.104(1978)] (Johnston 1997 and Shaffer 2005).

Program Elements

The basic elements of "successful" TDR programs have been identified as:

- A clear, valid public purpose: open space preservation, agricultural or forest preservation, protection of historic landmarks;
- Clear designation of the sending and receiving areas;
- Consistency between the location of sending and receiving areas and the policies of the comprehensive plan;
- Recording of the development rights as a conservation easement which informs future owners and makes the restrictions enforceable through civil action;
- Uniform standards for what constitutes a development right, preferably based upon quantifiable measures;
- Sufficient pre-planning in the receiving areas including provisions for adequate public facilities; and
- Sufficient allowable density in the receiving area to help ensure development is economically viable (Bredin 2000).

Numerous references have identified a variety of approaches and checklists to assist in the design and implementation of a successful TDR program. In 1975, Frank Schnidman presented 142 questions in an article in Urban Land that he recommended local jurisdictions answer before implementing a program (State of Washington 1992).

Another body of work discusses and makes recommendations on the process of creating TDR programs. Most authors agree that creating a "successful" TDR program requires in-depth planning, education and economic analysis. This work may be much more than is usually completed for traditional planning programs (State of Washington 1992).

Six essential steps in the creation of an effective TDR program are:

- Identify the actors in the real estate marketplace affected by the TDR program and the economic motivation of each actor;
- Identify potential receiving areas and thoroughly analyze the development opportunities and profits at various densities;
- Identify and analyze potential sending sites and balance environmental goals against economic realities;
- Make a critical choice between a voluntary or a mandatory program and between a totally private TDR market or a quasi-public market assisted by a TDR bank;
- Make the program and ordinances implementing it simple and flexible; and
- Ensure adequate promotion and facilitation of the program once it is initiated, and that the program is designed to continue despite possible political changes (Roddewig 1987).

Mandatory Versus Voluntary Programs

A mandatory TDR program designates all parcels within the sending area to have specific use restrictions whether or not a TDR transfer occurs. A voluntary program allows property owners in a sending area the option of using their property subject to legal use restrictions, or to sell/transfer the TDR and place the land use restriction on the property. "A voluntary program may avoid the legal taking issue that could result from mandatory programs. However, mandatory programs seem more successful because they provide incentives for sending parcels to sell their transferable development rights…However, programs can be voluntary and successful, but they must have strict sending area development restrictions as incentives to property owners to use the program along with other organized program characteristics or there is no market with supply and demand of the TDRs" (Danner 1997).

In the presentation and proceedings of the APA National Planning Conference of 2000, Bredin brings up the issue of whether a TDR program should be voluntary or mandatory but does not answer the question, instead suggesting that enabling legislation should authorize both.

Valuation

Four interdependent economic factors create value: utility, scarcity, desire, and effective purchasing power. The existence or nonexistence of these basic factors in a TDR program will affect market value of all TDRs in that program (Danner 1997). The principle of supply and demand, as applied in an appraisal context, states that the price of real property varies inversely, but not necessarily proportionately, with demand, and directly, but not necessarily proportionately, with supply (Appraisal Institute 1996).

Danner further comments that "unless a program is designed to give TDRs the four economic factors: utility (use), scarcity (limitations on availability), desire (demand), and effective purchasing power (reasonable price) – there is no market for them and hence no market value." This would imply that the utilization of the TDR approach is not suited to markets with modest growth.

According to <u>The Appraisal of Real Estate</u>, "Appraisers can value TDRs with ordinary sales comparison techniques if there are sufficient transactions to constitute a market. When market sales are lacking, the income capitalization approach may be applied." But Danner warns that the income capitalization valuation approach may not reflect any value associated with market activity.

In the state of Washington, "development rights are considered real property, and are taxed at the time of the sale or transfer" (Washington State 1992). Whether TDR is personal or real property differs in some legal interpretations and state codes. Therefore, comparison of values of TDR may not be possible across all different programs.

Enabling Legislation/ Legal Authority

Washington State does not have specific TDR enabling legislation but the Growth Management Act (GMA) provides numerous references to this approach, indicating legislative approval of the concept (State of Washington). A model enabling statute has been prepared as an element of the Growing Smart[SM] project, a multi-year initiative of the American Planning Association (Meck 2002).

Issues/Obstacles

Issues identified in a 1997 conference co-sponsored by the Regional Plan Association and the Lincoln Land Institute identified obstacles to establishing a working TDR program:

- Finding communities that will locate receiving areas for higher density development;
- Calibrating values for development rights in sending and receiving areas to insure a market for the rights;
- Creating a program that is simple enough to understand and administer and complex enough to be fair;
- Developing community support to insure the program is used; and
- Avoiding litigation and evasion (Lane 1998).

The second point addresses how to regulate (influence) the values of the TDR's. This would include how the "incentives" are designed for sending and receiving areas. Successful rural programs like Calvert County, Maryland, offer density bonuses to developers up to 1900% over base single family density. A community's growth must be sufficient to make this leap in rate of development for the program to be utilized.

While public support of TDR is repeatedly mentioned as an essential element of a successful program, a lack of political support is often the Achilles Heel to program utilization. If there is a faster or less expensive way for a developer to achieve additional density for a specific project, TDR will not be a viable business option (Boyd 2003).

One of the shortcomings of the Montgomery County program has been the lack of adequate public infrastructure in receiving areas. For example, the Fairland Planning Area was placed under a residential development moratorium in 1982 (still in place) because of failing infrastructure even though the new master plan promoted in 1981 included increased density with TDR. Other receiving areas allow building at less than maximum density and TDRs have not been implemented to the extent expected by planners (University of Maryland 2002).

Skagit County is currently implementing a successful purchase of development rights (PDR) program. Successful TDR programs tend to be the centerpiece land conservation program in localities. Skagit must consider whether the conservation market can and will make this adaptation; Skagit must determine how it can equalize the values between its PDR and TDR programs, when it appears the potential TDR market will not be able pay the same per development right that the PDR program has established.

Market Creation and Its Effects

A paper addressing the different markets in tradable environmental credits, notes that "the amount of development can actually rise from the sale of TDRs" The article also points out that if there is no cap on development in a single year, both the supply and demand for development rights will be critical for determining the amount of land to be preserved. "Often, reducing the allowable zoning density in preservation areas creates a large supply of development rights, but the difficulty remains in establishing a demand for those rights. Local governments are not inclined to reduce zoning density in other areas to create demand," so they allow developers to purchase development rights to build at a higher density than existing rules permit. However, with little demand for high-density development in many communities, there have been few sales of TDRs. "Such is the case in Montgomery County, where demand for rights has dropped and TDR prices are currently low" (Boyd 2003).

A TDR bank which buys development rights from the owners of sending parcels and sells them to developers of receiving parcels can be an important economic component of a successful TDR program. A bank can help stabilize a market by providing steady demand and reduce transaction costs because the bank can assist with legal and real estate procedures such as placement of use restrictions (Danner 1997).

Evaluating TDR Programs

There appears to be no consensus on measuring the success of a TDR program whether it be the amount of open space preserved, the number of transactions, the number of acres kept in farming, or the quality of development in the receiving areas. One planner, Charles Siemon, suggested that a TDR program might be considered a success even if no transactions take place because, in the context of the larger land use plan, the TDR program can make a preservation program more palatable by providing a landowner with additional options (Lane 1998).

At this same conference, the author states that it became clear that perceived success or failure of TDR is colored by excessive expectations. Some participants asked, 'Why should a TDR program be expected to accomplish more than any other single land use tool, such as zoning' (Lane 1998)?

Rick Pruetz, author of Saved by Development and Beyond Takings and Givings, the two most comprehensive texts on TDR programs, presents the Montgomery, Maryland, program as the "most successful program in the country," based upon the number of acres preserved through the program (Pruetz 2003). This determination is echoed in many papers on this issue, as many reference Pruetz for program statistics and evaluations. Public education and buy-in are presented as a critical element in program success and a pre-existing constituency is credited in both Montgomery County, Maryland, and Lake Tahoe, Nevada, in adoption of those programs (Hanley-Ford).

A 2002 study published in the Journal of Environmental Planning and Management proposes a framework for evaluating TDR programs, based upon a comparative analysis of 14 programs to develop a list of program characteristic and elements. A more in-depth analysis of 3 "well-documented programs" (New Jersey Pinelands; Montgomery County, Maryland; and Manheim Township, Pennsylvania) allowed development of an evaluative tool which characterizes program elements as "high, medium and low" (Machemer 2002).

The list of program characteristics this study chose for evaluation includes:

- Political foundation
- Consistent regulatory process
- Sense of place
- Resources in area seen as valuable
- Rapidly growing area
- Public acceptance
- Appropriate receiving areas
- TDR leadership
- Mandatory program
- TDR bank
- TDR compatible with PDR
- Simple and cost-effective
- Knowledge of development, local land use demands and patterns

This study ranked programs base upon the inclusion of program characteristics (above) that the review team identified in the comparative analysis and then assesses the "level" of effectiveness of each element. The paper does not detail how the levels of effectiveness were determined. But the study did "rank" Montgomery County's program as most effective with ten (10) “high” rankings, three (3) “medium” rankings and no (0) “low” rankings.

An in-depth analysis of the Montgomery County, Maryland, TDR program was completed in 2001 by the Community Planning Studio of the Urban Studies and Planning Program of the University of Maryland. Among the major findings about the health of the regional agricultural industry in this study:

- The program does not assure that agricultural lands will remain open space in perpetuity, “but only that they will be developed at a minimum of the zoned density 1:25. When Maryland counties are ranked by programs that provide long-term protection, (the distinction between TDR program and easement programs) …Montgomery County slips to fourteenth in the rankings.”

- “Montgomery County’s TDR program is preserving open space and maintaining farmland in the short-term, but not necessarily in the long-term…Recent county development pressures and resident wealth have instigated farm parcelization with the remaining right for division into 25-acre lots. The selling of rights helps farmers invest in their farms, but does not prevent development in the reserve or insure preservation of the agricultural uses.”

This study also examined changes in the County’s agricultural landscape including a 33 percent decrease in county farmland acres and a 21 percent decrease in the number of farms between 1978 and 1997 contrasted with only a 17 percent decrease in statewide acres of farmland and numbers of farms. The reductions in average market value of agricultural products sold, average market value of farmland and buildings, and gross revenues decreased more in Montgomery County than statewide (University of Maryland 2002).

The study the University of Maryland was the only analysis found during in this review that examined the economic condition of the working landscape and local resource industry as an aspect of their review of the program. They did not simply count the number of transactions or acres under easement as the sole measure of program performance. From that perspective, Montgomery’s program might be considered a success as an open space program, but a failure as an agricultural program.

Conclusions

Managing growth and land use effectively is a challenge many American communities face. In the context of property rights and personal profit, American communities of the 21st century are being forced to consider zoning and other regulatory policy as permanent and unchanging, with few options for improving conditions.

Adding to the challenge of making limited and obsolete policies work to solve growth issues, communities typically view land use and growth issues serially, in many cases expecting a new "tool" to solve the inadequacies of the others (Lane, 1998). Transfer of development rights (TDR) programs have been promoted as a market-based solution to almost every growth or preservation challenge local governments face. Unfortunately, when we look at them in the context of farmland and forestal preservation, we do not see the successes that the literature describes.

The common vocabulary associated with TDR is problematic. It characterizes disincentives as incentives. The distinction between voluntary and mandatory programs is confusing if not misleading. The outcomes are assessed quantitatively rather than qualitatively, if the outcomes are evaluated at all.

In terms of applicability for Skagit County, it must be determined, at the very least:

- if the local real estate market is sufficiently active to support new market TDR's;
- if there is a potential for down-zoning sending and/or receiving areas, and if this is politically feasible;
- whether TDR development right values can be equalized with the current PDR market; and
- whether other approaches will be more efficient and timely to achieve the goal of increasing the rate and amount of resource land conservation.

The TDR approach is most successful in targeted transactions that are either requested by a developer for a specific project or promoted by a locality as part of a finely detailed community development plan. Examples of successful implementation are usually in communities that have more overall development than Skagit County, where TDR serves as a corrective action to retire zoning capacity that is no longer desired and to promote higher density development as infill or redevelopment. Skagit lacks the existing urban/suburban element that absorbs the transferred rights.

Skagit may be well served to examine expansion of its existing Farmland Legacy Program through increased funding or innovative payment approaches; expansion of complementary conservation programs for both forestry and farming; and development of more specific goals for working lands conservation and industry support, in addition to development of a TDR program.

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References

Adelaja, Soji. 2005. "Preserving Farmland and Achieving Agricultural Viability in the State of Michigan," Michigan State University, East Lansing, MI.

(This Policy Analysis Report was prepared for the Governor of Michigan responding to recommendations made by the Michigan Land Use Leadership Council in developing a set of policies and strategies to preserve the agricultural land base and improve agricultural viability.)

Adolfson Associates, Inc. 2005. "Columbia Corridor Scoping Project: Draft Project Elements Memorandum." Prepared for the City of Portland, Portland, OR.

(This report sets forth proposed projects for implementation as part of the Columbia Corridor Project. TDR and land exchanges are reviewed as a possible tool.)

American Farmland Trust. 2001. "Purchase of Development Rights and Transfer of Development Rights Case Studies: prepared for the Boone County Planning Commission," American Farmland Trust, Washington, D.C.

(This is a report including three TDR case studies: Montgomery County, Maryland; Thurston County, Washington; Pinelands, New Jersey; Pennsylvania.)

American Farmland Trust. 1997. <u>Saving American Farmland: What Works</u>, Northampton, MA.

(This publication documents a variety of approaches to farmland and rural land conservation.)

American Farmland Trust. 2001. "Transfer of Development Rights," Fact Sheet, American Farmland Trust, Washington, D.C.

(This fact sheet gives an overview of TDR and documents programs as of 2000.)

American Littoral Society. 2005. "The Ins and Out of TDR: The Transfer of Development Rights Act, Making Growth and Open Space Work Together," The American Littoral Society, Sandy Hook, New Jersey.

(General background and how-to.)

The Appraisal Institute.1996. The Appraisal of Real Estate, 11th Edition, The Appraisal Institute, Chicago, IL.
(Land valuation principals.)

Bagli, Charles V. 2006. “Pact Reached to Redevelop Far West Side,” The New York Times, September 27, 2006, New York, NY.
(Article describing agreement to rezone land rather than transfer development rights.)

Barrows, Richard L. and Bruce A. Prenguber. 1975. “Transfer of Development Rights: An Analysis of a new Land Use Policy Tool,” American Journal of Agricultural Economics 57, 4: 549-557.
(This paper is a case study of a hypothetical TDR program looking at how program design and administration affect the distribution of program costs and implementation. It concludes that many practical difficulties remain n successful program implementation.)

Barrows, Richard L. and Bruce A. Prenguber. 1976. “Transfer of Development Rights: An Analysis of a New Land Use Policy Tool: Reply.” American Journal of Agricultural Economics 58, 4: 763-766.
(Further explanation.)

Boyd, James; Dallas Burtraw; Alan Krupnick; Virginia McConnell; Richard G. Newell; Karen Palmer; James N. Sanchirico; Margaret Walls. 2003. “Trading Cases: Is trading credits in created markets a better way to reduce pollution and protect natural resources?” Environmental Science and Technology.
(This report examines TDR in the larger context of tradable credit markets.)

Brandywine Conservancy Environmental Management Center. 2003. Transfer of Development Rights: A Flexible Option for Redirecting Growth in Pennsylvania, Brandywine Conservancy, Chadds Ford, PA.
(How to primer for Pennsylvania communities.)

Bredin, Esq., John B. 2000. “Transfer of Development Rights: Cases, Statutes, Examples, and a Model,” American Planning Association National Conference.
(This article reviews the relevant state statutes and case law on transfer of development rights, examines existing TDR programs, and extracts from these sources the basic elements of a potentially successful TDR enabling statute. A model statute is included.)

Calvert County, Maryland. 2005. “Agricultural Preservation Rules and Regulations,” Article 12, Agricultural Land Preservation Program, Public Laws of Calvert County, Maryland.

(Rules and Regulation.)

Cape Cod Commission. “Transfer of Development Rights: Cape Commission Model Bylaws and Regulations for Towns in Barnstable County, Massachusetts.”

(Bylaws)

Carter, Michael R. and Yang Yao. 1999. “Specialization Without Regret: Transfer Rights, Agricultural Productivity and Investment in an Industrializing Economy.”

(This paper is an analysis of property rights in the context of constraining economic performance in transitional economies (China).

Chomitz, Kenneth M. 2004. “Transferable Development Rights and Forest Protection: An Explanatory Analysis,” International Regional Science Review 27,3:348-373.

(This paper develops a simple, geographically explicit simulation model to examine the economic and environmental impact in forest lands in the Brazilian state of Minas Gerais. The model shows reductions in conservation cost form widening the geographic scope of trading; restricting the program to large landholders reduces transaction costs while only mildly reducing the amount of forest placed under protection.)

Costello, Kenneth R. 2006. “Preserving Property: Transfer of Development Rights Saves Natural and Historic Sites,” CIRE Magazine, CCIM Institute, Chicago, IL.

(This paper gives an overview of the first transfer of development rights project in Collier County, Florida.)

Daniels, Thomas L. 1999. “A Cautionary Reply for Farmland Preservation,” Planning & Markets, University of Southern California, Los Angeles, CA.

(This paper responds to Gordon’s (1999) assertions against farmland preservation.)

Daniels, Tom. 2005. “Land Preservation: An Essential Ingredient in Smart Growth,” Journal of Planning Literature, 19, 3:316-329. Sage Publications, Thousand Oaks, CA.

(This paper examines how to strategically include land preservation in shaping and directing growth as part of the comprehensive planning process.)

Daniels, Tom. "The Purchase of Development Rights, Agricultural Preservation and Other Land Use Policy Tools – The Pennsylvania Experience," State University of New York at Albany, Albany, N.Y.

(This paper documents a variety of implementation strategies in effect in Pennsylvania.)

Danner, John C. 1997. "TDRs – Great Idea but Questionable Value," The Appraisal Journal, 65,2:133-143.Chicago, IL

(This case study of TDR in Florida concludes that market value of TDRs does not necessarily reflect prevailing land value in either the sending or receiving area.)

Deininger, Klaus; Songqing Jin; Berhanu Adenew; Samuel Gebre-Selassie and Bernanu Nega. 2004. "Tenure Security and Land-Related Investment: Evidence from Ethiopia," World Bank, Washington, D.C.

(This paper is an economic study examining how government action to increase tenure security and transferability of land rights can enhance rural investment and productivity.)

Do, Quy-Toan and Lakshmi Iyer. 2003. "Land Rights and Economic Development: Evidence from Viet Nam," Development Research Group, The World Bank, Washington, D.C.

(This paper examines the impact of land reform which gave land owners the power to exchange, transfer, lease, inherit and mortgage their land use rights.)

Duke, Joshua M. and Lori Lynch. 2006. "Farmland Retention Techniques: Property Rights Implications and Comparative Evaluation," Land Economics 82(2): 189-213.

(This paper seeks to explain and evaluate the economic and political impacts of new and existing farmland retention techniques in terms of economically and politically important criteria affecting the policy process.)

Echeverria, John D. 2006. "Regulating Versus Paying Land Owners to Protect the Environment," Journal of Land, Resources, and Environmental Law 26(1): 1-46. Salt Lake City, UT.

(This paper examines the confluence of regulatory and voluntary approaches to land conservation.)

Eckstrom, Kevin. 2006. "For Urban Churches, Selling Hot Real Estate, the Sky's the Limit," Newhouse News Service.

(This article reviews sales of development rights from churches in Seattle to New York City.)

Edelman, Mark. 1998. "Transfer of Development Rights for Farmland Preservation," Extension News, Iowa State University Extension.
(Fact Sheet)

The Executive Office of Environmental Affairs. "Excerpts from A Study of the Feasibility of Establishing Transferable Development Rights under the Rivers Protection Act," The Department of Housing and Community Development, Commonwealth of Massachusetts.
(This is an explanatory piece prepared for the Massachusetts legislature to promote adoption of specific state enabling legislation, to support adoption of local TDR programs, and to explore what a state role might be in promoting use of TDR.)

Forest Trends. "Developing Markets and Payments for Forest Ecosystem Services," Technical Forestry Brief, Forest Trends, Washington, D.C.
(This brief is a discussion of market development for payments for forest services.)

Forest Trends. "Developing Markets and Payments for Watershed Services," Technical Forestry Brief, Forest Trends, Washington, D.C.
(This brief is an examination of market-based approaches to watershed protection.)

Forest Trends. "Making Markets Work for Conservation and People," Technical Forestry Brief, Forest Trends, Washington, D.C.
(This brief discussed the role of small producers and communities in conservation.)

Fulton, William; Jan Mazurek; Rick Pruetz; and Chris Williamson. 2004. "TDRs and Other Market-Based Land Mechanisms: How They Work and Their Role in Shaping Metropolitan Growth," The Brookings Institution Center on Urban and Metropolitan Policy, Washington, D.C.
(This discussion paper examines TDR and mitigation banks and concludes that they are typically not coordinated with more broad efforts to manage metropolitan growth.)

Glaeser, Edward and Joseph Gvourko. 2002. "Zoning's Steep Price," Regulation 25, 1: 24-30, The Cato Institute, Washington, D.C.
(This article posits that zoning and land use regulation are responsible for high housing costs, not increased land prices.)

Gordon, Peter and Harry W. Richardson. 1999. "Farmland Preservation and Ecological Footprints: A Critique," Planning & Markets, University of Southern California, Los Angeles, CA.
(This paper analyzes the case against farmland preservation and the ecological footprint concept.)

Hanly-Ford, Jason: George Homsy; Katherine Lieberknecht and Remington Stone. “Transfer of Development Rights Programs: Using the Market for Compensation and Preservation,” Cornell University.
(This is an overview of TDR.)

Higgins, Noelle. “Transfer of Development Rights.”
(Educational brochure for Washington State.)

Hrezo, Margaret S. 1980. “From Cropland to Concrete: The Urbanization of Farmland in Virginia.” Virginia Water Resources Research Center, Special Report No. 12, Virginia Polytechnic Institute and State University, Blacksburg, VA.
(This paper examines the tools available to address the transition of farmland and discussed TDR in this context.)

Johnston, Robert A. 1997. “From Landmarks to Landscapes: A Review of Current Practices in the Transfer of Development Rights.” Journal of the American Planning Association, Summer 1997. American Planning Association, Chicago, IL.
(This paper is an update of TDR.)

King County. Transfer of Development Rights (TDR); Chapter 21A.37.
(Ordinance)

Kinsey, David N. 1997. “Noncontiguous Parcel Clustering: A New Technique for Planned Density Transfer,” New Jersey Office of State Planning, Trenton, N.J.
(This Planning Report examines how density transfers will work under New Jersey’s Municipal Land Use Law.)

Kline, Jeffrey and Dennis Wichelns.1994. “Using Referendum Data to Characterize Public Support for Purchasing Development Rights to Farmland,” Land Economics.
(This is an econometric model that describes public support for farmland preservation programs as a function of local land use patterns and socioeconomic data.)

Kopits, Elizabeth; Virginia McConnell; and Margaret Walls. 2003. “A Market Approach to Land Preservation,” Resources, Spring 2003.
(Examines the Calvert County, Maryland, TDR program emphasizing the county’s participation through purchasing and retiring some rights.)

Kopits, Elizabeth; Virginia McConnell; and Margaret Walls.2003."Making Markets for Development Rights Work," Discussion Paper 05-45, Resources for the Future, Washington, D.C.

(This paper presents a simple theoretical model and estimates a TDR demand using Calvert County, Maryland, data. They find that baseline zoning is a critical determinant of TDR demand and identify subdivision characteristics that are significant in explaining TDR use.)

LaBelle, Judith M. 2004. "Market and Policy Tools for Improving Farm Viability," Session on Farmland Protection, Kellogg Food and Society Networking Conference.

(This presentation gives an overview of how public policy decisions affect farm viability.)

Land and Water Resources Council. 2001. "Report on the Use of Incentives to Keep Land in Productive Farming, Fishing and Forestry Use," State Planning Office, Maine.

(This report was presented to the Joint Standing Committee on Natural Resources, Taxation, and Agriculture, Conservation and Forestry of the 120th Maine Legislature including recommendations to further study of the potential to implement TDR programs in Maine.)

Lane, Robert .1998. "Transfer of Development Rights for Balanced Development," Land Lines, Vol. 10, Number 2, Lincoln Institute of Land Policy.

(Recounts the discussions and conclusions of a two-day conference of professionals convened to explore the potential and limitations of TDR programs.)

Lawrence, Timothy J. 1998. "Transfer of Development Rights," Ohio State University Fact Sheet, Community Development, Land Use Series CDFS-1264-98, Ohio State University, Columbus, OH.

(This fact sheet gives an overview of TDR and discussed shortcomings.)

Levinson, Arik. 1997. "Why Oppose TDRs: transferable Development Rights Can Increase Overall Development," Regional Science and Urban Economics 27,3:283-296.

(This paper formalizes the argument that trading development rights increases overall development.)

Libby, Lawrence W. 1997. "An Economic Perspective on Values and Natural Resource Policy," Center for Agriculture in the Environment, American Farmland Trust, DeKalb, IL.

(This working paper considers applications of normative and positive economics to natural resource problems. It concludes with a "users guide" for effective involvement of economists in natural resource management.)

Libby, Lawrence W. 1997. "Farmland Protection Policy: An Economic Perspective," Center for Agriculture in the Environment, American Farmland Trust, DeKalb , IL.

(This paper was presented at an economics seminar to introduce the subject matter of farmland protection policy and to draw upon the discipline of economics for the rationale for such policies.)

Libby, Lawrence W. and Peggy Kirk Hall, editors. 2003. "Transfer of Development Rights: A Real Policy Option for Ohio? – A Workshop Report," C. William Swank Program in Rural-Urban Policy, Department of Agricultural, Environmental, and Development Economics, The Ohio State University.

(This document reports the proceedings of a TDR workshop.)

Lincoln Institute of Land Policy. 1998. "Transfer of Development Rights for Balanced Development," Final Report of a Conference Sponsored by the Lincoln Institute of Land Policy and the Regional Plan Association, May 1998.

(This document is the proceedings of a two-day conference examining TDR including program evaluation.)

Machemer, Patricia L. and Michael Kaplowitz. 2002. "A Framework for Evaluating Transferable Development Rights Programmes." <u>Journal of Environmental Planning and Management</u> 45,6: 733-795.

(This paper uses an iterative, case-study approach to identify and classify TDR programmatic characteristics; develop a TDR evaluative framework; and uses the framework to examine three programs.)

Machemer, Patricia L.; Michael Kaplowitz and Thomas C. Edens. 1999. "Managing Growth and Addressing Urban Sprawl: The Transfer of Development Rights." <u>Research Report 563</u>, East Lansing, MI: Michigan Agricultural Experiment Station, Michigan State University.

(This is a research report presenting the theory and techniques of designing and implementing TDR programs.)

Machemer, Patricia L.; June Thomas; Roger Hamlin. 2000. “Transferable Development Rights: A Policy Brief for the Michigan Legislature,” Michigan State University Applied Public Policy Research Grant.
(This policy brief for the Michigan Legislature describes legislation in other states and efforts to adopt legislation in Michigan.)

Marquitz, Phyllis J. 2004. “Transfer of Development Rights,” The Agricultural Law Resource and Reference Center, Carlisle, PA.
(This paper is an overview of TDR and points out some program vulnerabilities and strengths.)

Massachusetts, The Commonwealth of “Transfer of Development Rights,” <u>Massachusetts Smart Growth Toolkit.</u>
(This is a model bylaw for local Transfer of Development Rights programs.)

McConnell, Virginia; Elizabeth Kopits; and Margaret Walls. 2003. “How Well Can Markets for Development Rights Work? Evaluating a Farmland Preservation Program,” Resources for the Future, Washington, D.C.
(This Discussion Paper analyzes the Calvert County, Maryland, TDR program.)

McConnell, Virginia; Margaret Walls; and Elizabeth Kopits. 2005. “Zoning, TDRs, and the Density of Development,” Resources for the Future, Washington, D.C.
(This Discussion Paper suggests that factors that affect both the value and cost of additional lots are important in the density decision made by developers. The empirical analysis highlights the usefulness of TDR markets to change the density of residential development.)

Meck, Stuart. 2002. <u>Growing Smart™ Legislative Guidebook 3</u>, American Planning Association, Chicago, IL.
(This is a series of publications presenting planning tools for communities.)

Mittra, Maanvi. 1996. “The Transfer of Development Rights: A Promising Tool of the Future,” Pace Law School, New York, N.Y.
(This paper is an overview of TDR with an in-depth examination of the Long Island Pine Barrens and New Jersey Pinelands programs.)

New Jersey Department of Community Affairs. “Transfer of Development Rights,” New Jersey Department of Community Affairs, Trenton, N.J.
(*This webpage gives an overview of the New Jersey program with links to other sites.)*

New York City Planning Commission. 2006. “August 9, 2006/Calendar No. 18 – N 060433 ZRM.” New York NY.

(Minutes from Planning Commission hearing regarding proposed amendments to clarify theater transfer provisions in Community District 4 and Community District 5, Borough of Manhattan (transfer of development rights from listed theaters.)

Nisanci, R.; B. Uzum; and M. Cete. 2004. “Transforming of Historical Real Estate Entities’ Property to Public Property,” KTU, Geodesy and Photogrammetry Engineering Department, Traboz, Turkey.

(This paper examines the possibility of transfers of development rights interest to protect historic properties which have become public assets for preservation.)

Nolan, John R. 1998. “Flexibility in the Law: The Re-engineering of Zoning to Prevent Fragmented Landscapes,” New York Law Journal.

(This paper shows how traditional zoning techniques have caused the fragmentation of landscapes and how adjustments to local zoning districts may accomplish less fragmentation.)

Pace Law School. “Transfer of Development Rights,” Series III: Innovative Tools and Techniques, Issue 8. Pace Law School, Land Use Law Center, White Plains, N.Y.

(This is an overview of TDR with select comments on limitations and concerns.)

Parmar, Anuradha. 2002. “TDR: Transfer of Development Rights,” Planning Tools Report, University of Texas, Austin, TX.

(This paper reviews the legal structure of TDR.)

Peddle, Michael T. 1997. “The Effects of Growth Management Policies on Agricultural Land Values,” Center for Agriculture in the Environment, American Farmland Trust, DeKalb, IL.

(This working paper concludes that both TDR and PDR are market-based methods of compensating landowners for surrendering development rights voluntarily.)

Powell, Ian, Andy White and Natasha Landell-Mills. 2002. “Developing Markets for the Ecosystem Services of Forests.” Forest Trends, Washington, D.C.

(This paper examines market development and payment scenarios.)

Pruetz, Rick. 2003. Beyond Takings and Givings: Saving Natural Areas, Farmland and Historic Landmarks with Transfer of Development Rights and Density Transfer Charges, Arje Press, Marina Del Rey, CA.

(An update of Pruetz's 1997 publication including new programs and legal issues.)

Pruetz, Rick. 1997. TDR: Saved By Development: Preserving Environmental Areas, Farmland and Historic Landmarks With transfer of Development Rights. Arje Press, Marina Del Rey, CA.
(The first comprehensive book on Transfer of Development Rights Programs.)

Pruetz, Rick.1999. "Transfer of Development Rights Update," 1999 APA Proceedings, American Planning Association.
(Notes from conference proceedings where Pruetz describes 12 new TDR programs and status reports on 23 programs which were subjects of earlier case studies.)

Richardson, Jr., Jesse J. 2003. "Downzoning, Fairness and Farmland Protection," Journal of Land Use (Vol. 19.1).
(This paper argues that fairness dictates that landowners be compensated when their property is downzoned to provide benefits of open space and/or farmland protection for the public at large.)

Robison, Rita R. 2002. "Development Rights Programs Gain Popularity," About Growth, Spring 2002. Washington State Office of Community Development, Olympia, WA.
(This article is a description of the operating programs and efforts at establishing TDR programs in Washington State.)

Roddewig, R.J. and C.A. Inghram. 1987. "Transferable Development Rights: TDRs and the Real Estate Marketplace," ASPO, Planning Advisory Service Report 401. 1-38. American Planning Association, Chicago, IL.
(This paper examines how TDR fits into the bigger real estate market.)

Rogers, Golden & Halpern. 1989. TDRs: A Resource Protection Program, Philadelphia, PA.
(This report was prepared by three economic and planning firms in response to questions raised during the 1989 Virginia General Assembly session regarding TDR enabling legislation proposes by the City of Virginia Beach.)

Sakashita, Noboru. 1998. "An Economic Analysis of the Transferable Development Rights," University of Tsukuba.
(The purpose of this paper is to quantitatively evaluate the amount of total ground rents which emerge under the condition of free markets, downzoning regulation, and TDR policy by a model

with specified functional forms, and to measure the degree of inefficiency related to the latter two policies.)

Scherr, Sara J. 2001. “Establishing Property Rights in Environmental Services,” Katoomba Working Group, Forest Trends, Washington, D.C.
(This PowerPoint presentation examines how property rights relate to payment for environmental services.)

Shaffer, Gail S. 2005. “Legal Memorandum: Transfer of Development Rights,” NYS Department of State. State Environmental Resource Center. “Transfer of Development Rights; Policy Issues Package.”
(This legal memorandum, prepared by a former New York Secretary of State, examines the first three seminal cases on TDR: PennCentral Transportation Company v. City of New York; Fred F. French Investing Co. v. City of New York; and Shubert Organization v. Landmarks Preservation Commission of New York.)

Smart Communities Network. 2004. “Land Use Planning Strategies – Transfer of Development Rights,” Smart Communities Network, National Center for Appropriate Technology, Butte, MT.
(This is a website with overviews of strategies and tools for land use planning with links to other sites and information.)

Sohngen, Brent and Michael Taylor. 1998. “Incentive Based Conservation Policy and the Changing Role of Government,” Center for Agriculture and the Environment, American Farmland Trust, DeKalb, IL.
(This working paper suggests how tradable pollution programs can be applied to provide private funding for agricultural conservation practices.)

Somin, Ilya and Jonathon H. Adler. 2006. “The Green Costs of Kelo: Economic Development Takings and Environmental Protection,” Working Paper 06-07, <u>Case Research Paper Series in Legal Studies,</u> Case Western Reserve University, Cleveland, OH.
(This paper examines the potential environmental effects of supporting takings for economic development.)

Spaziano, Sergio A. and Victoria Polidoro. 2005. “Balancing Development and Conservation: Transfer of Development Rights and Dutchess County, New York,” The Land Use Center, Pace Law School, White Plains, N.Y.
(This paper examines the application of TDR in Dutchess County, New York.)

Staley, Samuel R. 2001. “Market-Oriented Growth Management: Out of the Smart Growth Abyss,” Michigan Forward, Michigan Chamber of Commerce.

(This article advocates market-oriented growth management (MGM) which places consumers at the center of land development decisions.)

Staley, Samuel R. 2000. “The ‘Vanishing Farmland’ Myth and the Smart Growth Agenda,” Policy Brief 12, Reason Public Policy Institute, Los Angeles, CA.

(This paper suggests several market-oriented policy reforms to promote farmland preservation.)

State Environmental Resource Center. 2005. “Transfer of Development Rights: Policy Issues Package,” State Environmental Resource Center, Madison, WI.

(This package provides an overview of TDR and links to enabling legislation and statutes.)

Stinson, Joseph and Michael Murphy. 1996. “The Transfer of Development Rights,” Pace Law School, White Plains, N.Y.

(This paper is an overview of TDR, statutory authority in New York State with a review of judicial responses to TDR.)

Stoler, Michael. 2006. “Nonprofits Certainly Profit from Property Sales,” The New York Sun, New York, NY.

(This article summarizes a number of recent real estate and development rights sales in New York City.)

Sundberg, Jeffrey O. and Richard F. Dye. 2006. “Tax and Property Value Effects of Conservation Easements,” Working Paper WP06JS1.Lincoln Institute of Land Policy, Cambridge, MA.

(This paper calculates sample tax effects for a range of tax incentives and shows that many easements can qualify for subsidies that more than pay for the value of the easement.)

Swallow, Stephen K. and Michael P. McGonagle. 2006. “Public Funding of Environmental Amenities: Contingent Choices Using New Taxes or Existing Revenues for Coastal Land Conservation,” Land Economics 82(1): 56-67. University of Wisconsin.

(This paper encourages consideration of equity implications that may be obscured when analysts focus on willingness to pay.)

Tavares, Antonio. 2003. “Can the Market Be Used to Preserve Land? The Case for Transfer of Development Rights,” European Regional Science Association 2003 Congress Proceedings.

(This paper explores the economic arguments favoring the use of TDR programs, discussed the difficulties in implementing these programs in Europe, and presents tentative hypotheses to explain the adoption of TDR programs in local communities.)

Thorsnes, Paul and Gerald P. W. Simons. 1999. "Letting the Market Preserve Land: The Case for a Market-Driven Transfer of Development Rights Program," Contemporary Economic Policy 17,2: 256-267. Western Economic Association, Huntington Beach, CA.

(This paper uses a simple market model to develop a framework that examines allocation of marketable development rights (MDR) among all landowners in urban-fringe jurisdictions.)

1000 Friends of Minnesota. 2005. "Transfer of Development Rights," Fact Sheet #5, Land Conservation Tools. 1000 Friends of Minnesota, Saint Paul, MN.

(Fact Sheet.)

Turnbull, Geoffrey K. 2003. "Efficient Compensation Rules for Eminent Domain," Research Notes, September 2003, Number 1, Georgia State University.

(This paper examines compensation rates contrasting social and private value in the context of the public use doctrine.)

University of Maryland. 2002. An Analysis of the Transfer of Development Rights Program in Montgomery County, Maryland: A Report of the University of Maryland's Spring 2001 Community Planning Studio, University of Maryland, College Park, MD.

(This is an analysis of the Montgomery County, Maryland, TDR program including an assessment of the viability and economic health of county farming operations and industry.)

University of Wisconsin Extension Service. 1997. "Purchase of Development Rights May Become a Valuable Farmland Protection Tool in Wisconsin in the Next Century," Law of the Land Review, Cooperative Extension Service, University of Wisconsin, Stephens Point, WI.

(This is an overview of purchase of development rights.)

Virginia Natural Resource Institute. "Smart Growth and Conservation of Open Space: Private Markets, Public Responsibilities."

(This is a chapter in the handbook for the Virginia Natural Resources Institute regarding approaches to open space conservation.)

Voget, Jane J. 1999. “Making Transfer of Development Rights Work for Downtown Preservation and Redevelopment.” American Planning Association National Conference.

(This article describes how Seattle’s Transferable Development Rights (TDR) System works and how the City uses the System, including its TDR Bank, to implement public policy objectives in the context of growth and redevelopment of downtown Seattle.)

Walls, Margaret and Virginia McConnell. 2004. “Incentive-based Land Use Policies and Water Quality in the Chesapeake Bay,” Discussion Paper 04-20, Resources for the Future, Washington, D.C.

(This paper examines land use policies being implemented within the Chesapeake Bay watershed including TDR.)

Washington Department of Community Development.1992. “Transfer of Development Rights,” <u>Evaluating Innovative Techniques for Resource Lands, Part II</u>, State of Washington, Department of Community Development, Growth Management Division, Olympia, WA.

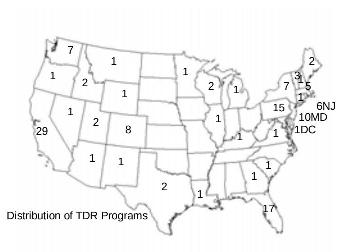
(This guidebook shows how transfer of development rights may serve as an alternative to large lot zoning and be used too conserve designated resource lands.)

WEI, 1997. “Agriculture and Land Use: Understanding the Purchase and Transfer of Development Rights,” Conference Summary Report, WEI, Madison, WI.

(This report gives an overview of presentations made by issue experts.)

TDR Program Feasibility Study
For Skagit County

Tuesday, July 18, 2006
Key County Staff Workshop



Country-wide Summary

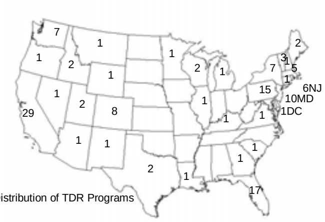
- 134 programs as of 2000 (Pruetz)
- Majority are multi-purpose programs (40)
- Next are environmental programs (34)
- Farmland is third most prevalent (27)
- 10 programs focus on historic resources
- 2 programs list open space as purpose
- None list forestry as primary goal

What is TDR?

"a land use regulation technique which can let a municipality have its cake and eat it too. It can be used to ensure that the open space requirements of the municipalities planning goals are met without causing financial burden to landowners or restricting needed development."

What is TDR?

" it permits preservation of lands where further development is undesirable for a variety of reasons; it does so without loss of new development to the community; and it does so without depriving landowners of a reasonable economic return on their property. The great advantage of the TDR approach is that it involves minimal expense to the municipality."



Distribution of TDR Programs

Elements of TDR Programs

- A clear, valid public purpose: open space preservation, agricultural preservation, or protection of historic landmarks
- Clear designation of the sending and receiving areas
- Consistency between the sending and receiving areas and the policies of the comprehensive plan and zoning
- Recording the removal of development rights as a conservation easement which informs future owners and to make the restrictions enforceable through civil action

Elements (cont.)

- Uniform standards for what constitutes a development right, preferably based upon quantifiable measures
- Sufficient pre-planning in the receiving areas including provisions for adequate public facilities
- Sufficient allowable density in the receiving area to help ensure development is economically viable
- Finding communities that will locate receiving areas for higher density development

Issues/Obstacles

- Calibrating values for development rights in sending and receiving areas to insure a market for the rights
- Creating a program that is simple enough to understand and administer, and complex enough to be fair
- Developing community support to insure the program is used
- Avoiding litigation and evasion

Identifying Success

Pruetz identifies 16 “top” programs:
- Montgomery County, Maryland + 40,000a
- New Jersey Pinelands +31,000a
- Calvert County, Maryland 8,900a
- Boulder County, Colorado 4,700a
- Dade County, Florida used 829 of 4,700 SUR
- Long Island Pine Barrens 315 a
- Cupertino, California 40 transfers
- Los Angeles, California

Identifying Success (cont)

- Pruetz identifies 16 “top” programs:
  - Malibu Coast, California
  - New York, New York
  - San Francisco, California
  - San Luis Obispo, California
  - Seattle, Washington
  - Tahoe Regional Planning Agency
  - Palm Beach County, Florida
  - Pitkin County/Aspen, Colorado

Montgomery County, MD

- Population 873,341 (2000)
- 323,000 acre county immediately nw of Washington, DC
- Cities of Bethesda, Silver Spring, Wheaton, Rockville and other suburbs
- Task force recommended a downzoning with compensation for sale of DRs
- 1980 Master Plan to preserve farmland

Montgomery (cont.)

- 163,000 acre study area
- 26,000 acres designated *Rural Open Space* already developed limiting agriculture
- 110,000 acres designated *Rural Reserve*
- 92,591 acres rezoned from 1:5 to 1:25 in Rural Reserve based upon a study showing 25 acres was smallest farm for cash crops

Montgomery (cont.)

- Rural Density Transfer encouraging cluster was adopted
- TDR allowed at 1:5 ratio to designated receiving areas (= transfer ratio of 5 to 1)
- Created 18,319 theoretical TDRs on 91,591 acres
- 12,297 TDRs actually existed
- 1980 – county identified first receiving area

Montgomery (cont.)

- County created TDR fund as last resort buyer to assure market available (ended)
- Planned adequate infrastructure in receiving areas
- Assigned dual densities in receiving areas
- Also can increase density by building moderately priced units (MPDUs)
- Minimum density at 2/3 maximum

Montgomery (cont.)

- Incentives:
  - Speed of approval
- Rezoning not necessary
- Consistent with normal review process

- *Status:*
  - 40,583 acres preserved through TDR (<50%)
  - 11,897 acres in other programs

Montgomery (cont.)

- Shortcomings:
  - Approval can take up to 2 years
  - Sending area densities were established in blanket fashion rather than site capacity, reacting inequities in compensation
  - Incorporated municipalities have not participated in program resulting in lower receiving area densities

Montgomery Analysis

- Major Findings:
  - MCTDR is preserving open space and maintaining farmland in the short-term, but not necessarily in the long-term.
  - The receiving area selection process did not take into account the already failing infrastructure of some Planning Areas and did not provide sufficient support to insure necessary level of service.

Montgomery Analysis

– The portrayal of the TDR program to the residents in lower MC was not consistent with its implementation in the county.
– Jurisdictions with more political organization succeeded in reducing the number of receiving areas approved in the master planning process.
– One must compare the finer details of all the preservation programs across all Maryland counties to assess Montgomery's success in preserving agricultural land.

Montgomery Analysis

- *Changes in the County's Agricultural Landscape…*
  – The future viability of farming in MC needs to be examined. After adjustments for inflation, the revenue from the land is decreasing.
  – From 1978 to 1997, there was a decrease in county farmland acres (33 percent) and the number of farms (21 percent), while the state farmland acreage decreased by only 17 percent with a similar decrease in farms.

Montgomery Analysis

– Additionally, the average market value of farmland and buildings declined 37 percent
– Indicators showed Montgomery County agriculture lagged the state:
  - Smaller
  - Principal occupation
  - Older
  - Market value of agricultural products
  - Harvested cropland lags state average
  - Nursery and Greenhouse crops higher

Montgomery Analysis

– The average market value of agricultural products sold dropped 48 percent ($16m decrease) while the state only saw a 32 percent decrease.

- *Concerning Development Rights…*
  – Over 5,000 development rights have been sold since 1980. Since 1990, fewer than 200 have been sold per year, over the past 3 years, less than 100 have been sold annually.

Montgomery Analysis

– TDR prices have fluctuated greatly. When adjusted for inflation (to 1999 dollars), the price per right reached a low of about $5,500 in 1987 and a high of $11,600 in 1996. The price of $7,500 in 1999 was considerably lower than the starting price of $9,100 in 1981.

– As of 2000, about 41,270 acres were in the TDR program and about 12,211 acres in easement programs. About 88,800 acres are public land.

Montgomery Analysis

- *Impacts of the TDR Program on Receiving Areas…*
  – The median value of homes for all receiving areas is approximately 89 percent of the value of homes in Planning Areas which contain receiving areas. The rate of owner-occupied housing is lower, as well.

  – The proportion of total housing units developed with TDRs is extremely varied across developed areas.

Montgomery Analysis

- Some county regions with TDR zones lost a high percentage of development potential because of environmental constraints and public pressure against development.
- The county's Annual Growth Policy shows that a number of Policy Areas have been un moratorium for residential development for more than 12 years.

Montgomery Analysis

- Landowners are allowed to retain the last 20 percent of rights. The owners may still develop at 1 unit per 25 acres (1:25), the zoned density. This has caused farm parcelization.
- When Maryland counties are ranked by programs that provide long-term protection for farmland, (the distinction between TDR and easement programs) Montgomery County slips to 14th in the rankings.

Montgomery Analysis

- *The county should facilitate the creation of a data bank.* Current available information is not sufficient to analyze the needs of county residents in relation to the use of TDRs and increased density. Among its many benefits, an effective data bank would enable planners to monitor the trends in agricultural land uses, locate the remaining 5th TDR, and measure historic changes in school capacity and the subdivision of reserve parcels for non-agricultural uses.

Montgomery Analysis

- Reference:
  - *An Analysis of the Transfer of Development Rights Program in Montgomery County, Maryland: A Report of the University of Maryland's Spring 2001 Community Planning Studio.*

Conclusions

- Accurate data are needed to create an effective and balanced program.
- Adequate infrastructure must be provided in receiving areas.
- The residual density of sending areas must be low enough to assure the viability of working landscapes.

Conclusions

- Lack of political will can render TDR superfluous.
- Balance between the sending and receiving areas is essential to a fair and successful program.
- The real estate market must be robust enough to utilize a TDR program.