

TRANSFER OF DEVELOPMENT RIGHTS AND OPEN SPACE PRESERVATION

Michael A. Slavney, FAICP

Vandewalle & Associates

Transfer of Development Rights (TDR) is one of several techniques for preserving open space areas. TDR involves the relocation of development potential from an area designated for open space preservation (a "sending area") to an area designated for development (a "receiving area"). The developer of the receiving area purchases the development rights from the sending area, and the sending area is left with a conservation easement on the property that prohibits further non-agricultural development.

The transferred development rights enable more valuable development – through a higher density and/or more lucrative land uses.

For example, the acquisition of TDRs might be required to secure small lot single family zoning from regular single family zoning, or multi-family zoning from single-family zoning, or commercial zoning from residential zoning. The design of these ratios before and after transfer, is the key to the success of a TDR program.

The overall effect of TDR is to increase the value of land in the sending areas (until the development rights are sold and transferred) and to reduce the value of the raw land in the receiving areas (because of the need to secure development rights for more intensive development, in addition to a change in zoning). This is an intended effect – with TDRs being used to share the "windfall" receiving area properties gain by inclusion within an Urban Service Area, up-zoning, and sale to a developer, with the sending area properties that are planned and zoned for permanent open space preservation.

A TDR program must work hand-in-hand with zoning and land division regulations, and is administered by a local government unit. Because TDR programs involve a relocation of development potential, public money is typically used only to administer the program, and is not used to directly acquire open space lands or conservation easements. In this regard, it is a "low cost" preservation option.

The price of a TDR is typically set on the open market. The price is related to the increase in the value of the receiving area that the use of the TDR creates through increased development potential. Because there are many possible combinations of baseline and ultimate zoning, the market price of TDRs will likely vary widely – adding complexity and subject to criticism for not creating a "level playing field". The concept, which requires TDR for increased development density or intensity, is also criticized for creating a *disincentive* for more compact development.

As an alternative, a TDR system could require the acquisition of TDRs to simply enable development beyond rural levels (or to add parcels to the urban service area) – thereby creating an *incentive* for more compact development.

TDR is not a common open space preservation tool – primarily because of its complexity. Municipalities are often uncomfortable with adding another layer of regulation beyond urban service area requirements, zoning and land division requirements – with a particular recognition of the direct involvement in the economics of development that TDRs entail. This is in contrast to the simple Purchase of Development Rights (PDR) or Agricultural Conservation Easements (PACE) programs funded by local tax revenues combined with grants and donations, or by simply relying on maintaining agricultural zoning for the long haul.

	Agricultural Zoning	Purchase of Development Rights or Agricultural Conservation Easements	Transfer of Development Rights
Technical Complexity	Simple In Use Currently Throughout Dane County	Simple In Use Currently in the Town of Dunn	Complex In Use Currently in the Town of Cottage Grove
Cost to Public	Very Low Cost Based on Zoning Regulations Administration Expenses	Moderate to High Cost Need to Raise and Administer Tax Receipts, Select Properties & Purchase Easements Costs are substantially lower where adopted plans and zoning limit development potential to agricultural uses	Low Cost Need to Carefully Design, Monitor and Administer TDR System & Secure Easements
Sustainability	Varies Always subject to upzoning -- Arguably unsustainable on a permanent basis	Moderate to High Conservation easements are permanent. Public support for tax is required on an on-going basis	Low to High Conservation easements are permanent. Public support for complex program is required on an on-going basis

OPEN SPACE PRESERVATION DECISION FACTORS

1. Fundamental Political Support

Does the community value open space preservation for protecting:

- a. Sensitive environmental features?
- b. Distinct community or neighborhood identity?
- c. Productive agricultural lands?
- d. Rural character?

"Yes" answers support exploring an open space preservation initiative

2. Legal Foundation:

What techniques are currently in place for holding open space:

- a. Utility Plans?
- b. Land Use Plan?
- c. Urban Service Area Limits?
- d. Agricultural and/or Conservation Zoning?
- e. Land Trust and/or Conservation District?

"Yes" answers support exploring an open space preservation initiative

3. Intergovernmental Framework:

What complexities are added by other governmental units:

- a. Need to annex to provide greenfield development?
- b. Majority of open space located beyond municipal limits?
- c. Zoning of open space areas under control of other jurisdiction (County/ETJ/Town)?
- d. Presence of competing annexing jurisdictions?

"No" answers support exploring an open space preservation initiative

4. Development Market Factors:

How strong is the local development market:

- a. Strong or steady market for development in general?
- b. Political support and regulations enable denser development?
- c. Political support and regulations enable mixed use development?
- d. Lack of comparable competing communities?

"Yes" answers support exploring an open space preservation initiative

5. Prevalent Attitude about Property Rights vs Community Rights:

- a. Everyone should be able to develop their property now to its full potential
 - Basic active public park system is indicated via dedication
- b. Everyone should be able to develop their property to its full potential at a time that benefits the public
 - Basic active and passive public park system is indicated via dedication
- c. Everyone should be able to develop their property in a manner and at a time that benefits the public
 - Interconnected active and passive public park system is indicated via dedication
- d. Not everyone should be able to develop their property. Some areas within the community should remain as open space through public purchase
 - Interconnected active and passive public park system is indicated via dedication, plus one or more of 1.a.-d. via PDR with increasing challenges in an expanding community.
- e. Not everyone should be able to develop their property. Some areas within the community should remain as open space by having land owners who sell for development share their profits with the owners of open space
 - Interconnected active and passive public park system is indicated via dedication, plus one or more of 1.a.-d. via TDR with increasing challenges in an expanding community.

Conclusion: Does the Community Support Permanent Open Space Preservation:

Will the elected officials and citizens support:

- a. Permanent agricultural or conservation zoning? Y: Zoning only is an option
- b. Taxes for purchase of development rights? Y: Zoning + PDR is an option
- c. Additional development rules for TDR? Y: Zoning + TDR is an option

Transfer of Development Rights Programs

Using the Market for Compensation and Preservation

Jason Hanly-Forde, George Homsy, Katherine Lieberknecht, Remington Stone

Local governments undertake transfer of development rights (TDR) programs to use the market to implement and pay for development density and location decisions. TDR programs allow landowners to sever development rights from properties in government-designated low-density areas, and sell them to purchasers who want to increase the density of development in areas that local governments have selected as higher density areas.

TDR programs appear to offer many advantages to local governments that want to control land use but also compensate landowners for restrictions on the development potential of their properties. TDR programs can be easier to implement than typical zoning programs; they make development more predictable and use the market to compensate landowners for lost property value. TDR programs are also more permanent than traditional zoning regulations.

Although TDR programs appears to be a potentially powerful land use tool, few communities have had success in using these programs because of the associated challenges . TDR programs do not reduce the need for zoning and can actually be more complex to administer. Communities may not support TDR programs, and local governments may have to invest in community education programs to explain them to the public. Lastly, although the permanency of TDR programs can be an advantage, it may also be a liability, since a community's land use needs change over time.

Local governments that are interested in TDR programs should consider both how to create a strong market for development rights in their communities and how TDR programs interact with the 'takings' issue. The final part of this paper presents advice and information on both these topics and ends with an evaluation of TDR programs as a governing tool.

- What is the history of transfer of development rights programs?
- What is a TDR program?
- How does a TDR Program Work?
- What are the advantages of TDR programs?
- What are the challenges of TDR programs?
- How can local governments build a market for a TDR program?
- Should local governments worry about TDR and 'takings' law?
- Is a TDR program a good governing tool?
- Conclusions

Landownership was one of the first measures of citizenship in the United States. The passion to protect the right of property owners to reap economic gain from their land still burns strongly today. Because of this, local governments often encounter citizen resistance to land use controls that attempt to provide for a public good. As a result, zoning can be very difficult to implement.

Many planners tout transfer of development right (TDR) programs as a way to take the politics out of zoning. With TDR programs, the market makes land use and density allocations and compensates property owners whose development rights have been limited in order to preserve some societal good, such as open space, farmland or historic preservation. It is a potentially powerful tool, but in its thirty year history, it seems to have made little headway in communities across the country. This paper examines TDR programs, their benefits and their costs and suggests why the adoption of this tool has been limited.

What is the history of transfer of development rights programs?

Zoning was the first widespread attempt to balance individual property rights against the good of society. Early advocates also suggested that zoning would enhance property values (Karkainen, 1994).

In 1916, New York City enacted the nation's first comprehensive zoning ordinance after a spate of skyscrapers blocked sunlight from neighboring properties. At the same time, warehouses and factories were encroaching on fashionable retail areas of Fifth Avenue. The new zoning ordinance set both height and setback requirements and separated incompatible uses, such as factories and residences (City of New York Department of Planning, 2002).

From the beginning, critics complained about the unfairness of zoning since it benefits some landowners and limits others. In 1926 the U.S. Supreme Court ruled in the landmark case of *Village of Euclid, Ohio v. Ambler Realty* that the legal system recognizes many kinds of unequal burdens (Karkainen, 1994). The *Euclid* case required two hearings before the high court narrowly affirmed a community's ability to zone. (Callies, Freilich and Roberts, 1999)

The idea of transferring development rights between properties was first introduced in New York City with the passage of that first American zoning ordinance in 1916. It allowed landowners to sell their unused air rights to adjacent lots, which could then exceed the new height and setback requirements. In 1968, the city Planning Commission changed the rules to allow transfers between lots several blocks apart (Johnston and Madison, 1997).

In the early 1980s, the command and control nature of many regulations came under fire as an inefficient. Policy makers searched for ways to govern using the market (Henig, 1989-90). In 1986, Australia created a system of tradable fishing permits to stabilize lobster populations. During the first half of the 1990s, a system of tradable pollution credits in the U.S. cut emissions of sulfur dioxide (which causes acid rain) in half (Brown, 2001). With these successes, market advocates found the world moving in their direction—toward answering all kinds of societal questions with economics. Land uses proved to be no exception.

What is a TDR program?

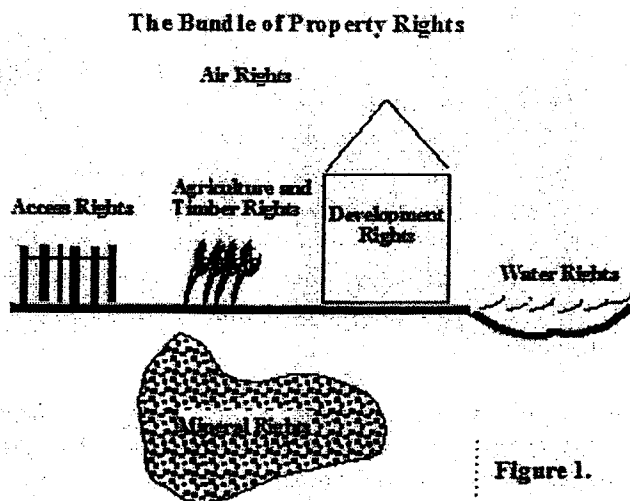
Most people have a very two dimensional view of their property—just a piece of land on which to build a house or commercial building. But the bundle of rights that comes with a piece of property is much more complex. Some physical rights, depicted in Figure 1, include the rights to build, exploit natural resources, restrict access and farm. Other legally enforceable rights include the right to sell the land, subdivide it, rent it out or grant easements across it.

TDR programs allow landowners to sever the building (aka development) rights from a particular piece of property and sell them. Purchasers are usually other landowners who want to increase the density of their developments. Local governments may also buy development rights in order to control price, design details or restrict growth.

TDR programs strive for two main goals. First, communities can use TDR programs to preserve open space, agriculture, historic buildings or housing. And TDR programs make such preservation more equitable and politically palatable by compensating landowners who lose the right to develop their property.

How does a TDR Program Work?

To demonstrate the operation of a TDR program, we have created a fictional farming community called Circle County.



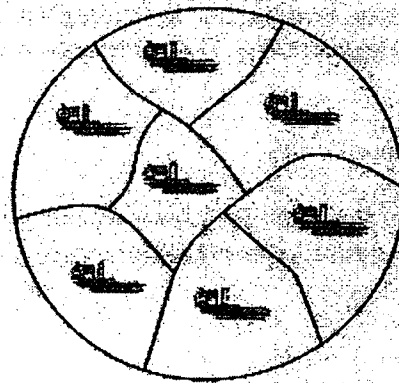


Figure 2 - Circle County

At first, Circle County is completely devoted to agriculture (Figure 2). However, its farms face development pressure from a growing urban area not depicted on the illustration.

At some point that pressure makes it economically less likely the land would

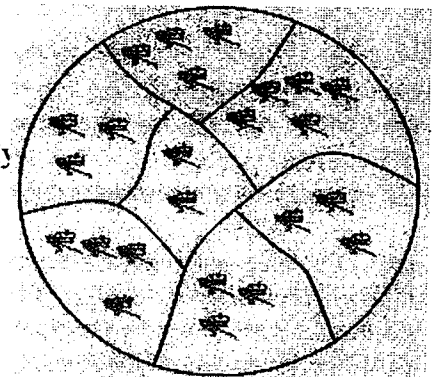


Figure 3 - Typical Sprawl Pattern

remain in agriculture (Heikkila, 2000). Indeed many farmers call the option to develop their land their "retirement plan." When left to traditional zoning, market pressure often causes low density development, that is, suburban sprawl (Figure 3).

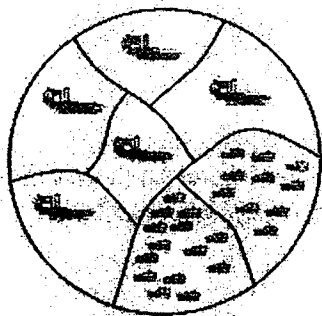


Figure 4 - Circle County TDR Program *TDR programs compensate property owners.*

However, Circle County government leaders decided to preserve their rural character. Under traditional zoning the only option would have been to tell some farmers that they could not sell their land for development. Instead the government instituted a TDR program. Farmers in the northern and western parts of the county could sell their development rights to builders in the southern and eastern areas designated for more density (Figure 4).

What are the advantages of TDR programs?

Local governments use TDR programs to mitigate the economic impact of land use regulations, specifically to compensate landowners for perceived partial takings (Johnston and Madison, 1997). This planning tool offers landowners a way to recapture some lost economic value when a property is downzoned^[1] from residential use to agricultural use for preservation purposes.

TDR programs are an easier way to implement zoning.

TDR programs do not replace zoning, but make strong land use regulations more politically feasible and easier to implement (Barrese, 1983). Local officials feel less political pressure if landowners are compensated for their "lost" rights. And a well-constructed TDR program reduces the demand for zoning variances, since developers will use the market, not their connections to the local zoning commission, to secure additional development rights.

TDR programs provide private funding for protection.

Housing in Seattle

Seattle, Washington created a TDR program for affordable housing in 1985. The TDR program has created or preserved 559 units of affordable housing. It was recently reconfigured to create another 900 units.

(Walker, 2002)

Finding public funds to protect open space and historic buildings is increasingly difficult as governments carefully watch their bottom lines. One reason local governments created TDR programs was to leverage market monies to achieve such goals. (Wolfram, 1981).

TDR programs make development more predictable.

Developers benefit from the clarity and consistency that TDR programs offer (Pruetz, 1997). Instead of incurring the costs and risks of negotiating for variances, developers can exceed certain zoning regulations simply by purchasing development rights from other property owners.

TDR programs are more permanent than zoning.

Since TDR uses deed restrictions or conservation easements to sever and extinguish development rights, public values such as open space and historic buildings are permanently protected. In contrast, zoning rules can change over time and with new administrations.

"Zoning is just two public hearings and one vote away from changing."

*Jim Lively, Planner
Michigan Land Use Institute*

What are the challenges of TDR programs?

TDR programs do not reduce the need for planning.

TDR programs only work in conjunction with strong zoning ordinances and good comprehensive planning. However, building political consensus on zoning issues is always a challenge. As a result, successful TDR programs require the commitment and political will of the community (Lane, 1997).

TDR programs can require increased administration.

In reality, TDR programs may be more complicated and expensive to implement than traditional zoning. Local governments must oversee (or contract out oversight of) the market; track and defend deed restrictions; and assist in proper preparation of easement documents. In many cases, the local government may regulate the market through TDR banks^[2] or other tools.

TDR programs require increased public education.

Citizens, real estate professionals, lawyers, assessors, and planners all need to be educated in the TDR process. Since successful programs require community buy-in, local governments must market the program, using mailings, public meetings, and advertisements. For example, efforts to institute a TDR plan in Santa Fe, New Mexico started with an all-day workshop (Pruetz, 2002).

Communities may not support TDR programs.

Despite public education efforts, it may be difficult to find areas willing to accept higher density development (receiving areas), since many people perceive that high density development decreases property values and quality of life.

"[The process of creating] a valuable receiving area involves the kind of higher density zoning that many conservation-minded suburbanites want to prevent in the first place."

(Haar and Kayden, 1989, p. 151)

TDR protects preservation values permanently.

Although some consider the permanence of a TDR transfer to be a benefit, it also limits the future options of a community as societal values and community characteristics shift.

How can local governments build a market for a TDR program?

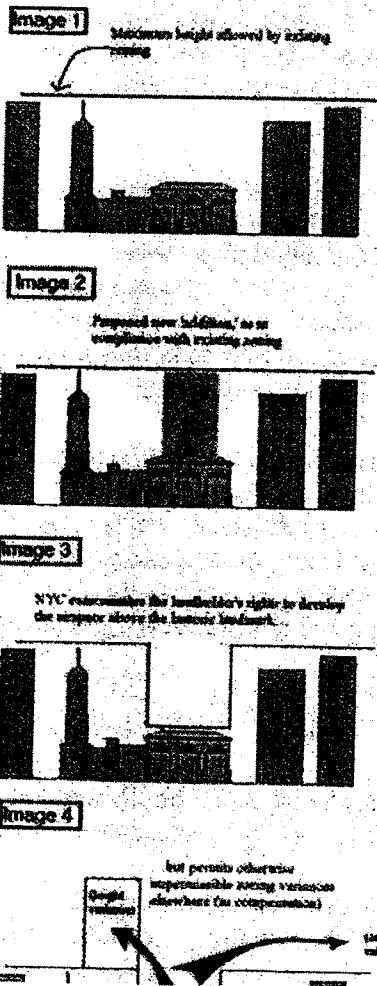
Comprehensive land use and fiscal planning

Successful TDR programs start with strong comprehensive plans. Communities must encompass a enough land to have sufficient sending and receiving areas. Otherwise some kind of regional government or inter-municipal pact is needed to carry out the program and ensure the fair distribution of development and tax revenues. The planning process must also accurately gauge the desires of the community for development and preservation.

The supply side: sending areas

In the areas where land will be preserved, property owners must be motivated to sell their development rights rather than fully develop the land themselves. Commonly this is done by downzoning their land to a lesser density. Other factors may constrain development, such as environmental regulations, site problems or adequate public facility ordinances^[3]. These factors can compel property owners to sell their development rights. In addition, a favorable transfer ratio from the sending area to the receiving may make the transfer lucrative enough to entice sellers. For example, in Montgomery County five times as many TDR credits could be transferred out as could be used on site.

Figure 5. Grand Central Terminal



The demand side: receiving areas

Designating the receiving areas can be the trickiest part of setting up a TDR program (Canavan, 1990). A working market requires that receiving areas face a demand for denser development than is currently allowed. For example, in Montgomery County developers used TDR credits to build, attractive transit-oriented-neighborhoods around the Bethesda and Silver Spring Metro transit stations.

Requirements that development projects use TDRs are an effective, if coercive, means of forming a market. And if communities eliminate alternative ways of achieving higher densities, such as variances, then the purchase of development rights becomes a necessity. This can have mixed results. The variance process is often viewed as flawed and tilted towards property interests. However, it can be much more responsive to changing community needs than a TDR program.

Other possible incentives for developers to buy building rights include maximum density bonuses, exemptions from some development impact fees, or even exemption from certain development standards like setback, open space, and parking requirements. (Pruetz, 1997)

Community participation in the comprehensive planning processes is particularly vital in receiving areas since many residents might believe that high density development lowers property values and diminishes quality of life.

Rights as currency

In communities with TDR programs, the rights become

A Model TDR Program: Montgomery County, MD

The Montgomery County, Maryland is touted as having one of the most successful TDR programs in the nation. Since its inception in 1980, the county has protected over 50,000 acres of farmland and open space. Montgomery County's achievement is due in large part to its success in forming a market for development rights.

(Montgomery County Planning Board, 2002)

Grand Central Terminal, New York City

Grand Central Terminal, constructed in 1913, is one of the city's architectural masterpieces.

the currency of development. The development value (not price) of a TDR credit is set so that one equals another. Credits can be bought and sold at any time, not just when a particular development in the receiving site is pending. Also, a TDR should be a general investment available to anyone, not just possible developers. Local citizens, land trusts and investors may all have an interest in the market for other reasons aside from development.

Sometimes a municipality may step in and act as a broker, buying TDR credits for later sale. This idea of a TDR bank is increasingly popular. Municipalities can act essentially as a federal reserve bank influencing the price of the development rights. Some communities also put conditions on the sale of rights from their bank in order to influence other aspects of development, such as design details or affordable housing requirements. Finally, if the government buys TDR credits without eventually transferring them to a developer, the program can be a tool for restricting growth, similar to the more common 'purchase of development rights' program.

Brokers often step in to facilitate transactions, charging a fee of six to seven percent of the total price just as in regular real estate transactions. In some cases brokers may wind up advertising their TDR services, possibly taking over the marketing function from the government (Pruetz, 1997).

Administration

Public education is essential so that everyone remembers the program goals and learns the operation of the market. Mailings to and public meetings for landowners in sending areas, potential developers and residents of receiving areas are an integral part of the education effort. TDR program staff can also assist people with the legal aspects of the program.

When deciding on the number of TDR credits to make available, most literature recommends setting the ratio of sending credits to potential receiving credits to at least 2:1. This leaves room for receiving sites to be developed without fully using TDR credits to increase density to the maximum allowable. Montgomery County has used more than half of the sending TDRs but found that the ratio is down to about 1:1. (Montgomery County Planning Board, 2002) As a result, the price of development rights has dramatically decreased, so the county is in the process of looking for more receiving sites.

Communities must monitor the progress of the program to ensure that goals are met. If local governments do not have the expertise or interest in administering a program, they can consider hiring a local land trust or other service provider.

Should local governments worry about TDR and 'takings' law?

The Fifth Amendment to the U.S. Constitution reads, in part, "nor shall private property be taken for public use without just compensation." Traditionally, a taking was defined as a physical seizure of property by the state.

However, in 1922 the U.S. Supreme Court ruled that governmental interference in the form of excessive regulation may be so burdensome to a landowner as to have the same effect as an actual physical invasion thus establishing the regulatory taking. (*Pennsylvania Coal Co. v. Mahon*). Land use zoning falls under this broad legally-murky category

In the late 1960s, the Penn Central Transportation Company wanted to construct a 53-story 'addition' over the protected landmark. The city decided the tower would destroy the character of the Terminal, so they allowed Penn Central to transfer the development rights to adjacent properties. (Figure 5)

TDR and Land Trusts

Since the land trust community has experience in the facilitation and administration of purchase of development right programs, local governments may want to explore the possibility of partnerships with private land trusts.

Local land trusts may be able to assist with education of the community, the marketing of the program and the facilitation of the conservation easements or deed restrictions. Clear and comprehensive contracts between the local government and the land trust are an essential element of any partnership.

So far, private land trusts haven't had much participation in local government TDR programs (Land Trust Alliance, 2002). One notable exception is that many municipalities donate the conservation easements that extinguish transferred development rights to a local land trust.

of regulatory takings.

To complicate matters, the High Court has ruled that a landowner must lose total use of the property before the government pays compensation. A *partial taking* need not be compensated at all. Consequently, the state has every incentive to have its actions deemed partial rather than full takings. Some municipalities view TDR programs as a way to achieve this goal.

In *Penn Central v. City of New York*, the Supreme Court seemed to indicate that TDR credits have a value that could prevent a total taking of property - and thus require compensation. However, in the more recent *Suitum v. Tahoe Regional Planning Agency*, this attitude seemed to change. In a concurring opinion, Justice Scalia wrote that "TDRs... have nothing to do with the use ... of the land to which they are attached. The right to use and develop one's own land is quite distinct from the right to confer upon someone else an increased power to use and develop his land." However, Scalia goes on to praise TDR programs as a valuable land use tool, but not as a way for the government to avoid a takings claim.

It must be noted that the *Suitum* case concerned only the legal outer bounds of the issue - situations in which parcels in a given sending area are stripped of all rights to build. So long as a bare minimum of development is permitted on a particular set of landholdings, there may be no 'takings' issue. Montgomery County cleverly kept within the bounds of this loophole because it rarely zones land as zero-growth. It implemented a baseline minimum of one dwelling per 25 acres in its sending areas. (The result has been a proliferation of overpriced rural 'estates', which may be less desirable than maintaining agricultural land, but may be more attractive than the sprawling alternative.) (Pruetz, 1998)

Also, the *Suitum* case heard by the Supreme Court might have been deemed a 'just compensation' if Lake Tahoe had some sort of TDR bank in place, whereby the owner could have quickly and easily sold TDRs at a fair minimum price without having to enter the marketplace. A TDR bank ensures liquidity and bridges the time gap between when an owner wishes to sell rights and when a developer needs to purchase them.

Is a TDR program a good governing tool?

Salamon (2002) cites five criteria on which we can judge the quality of a particular governing tool: effectiveness, efficiency, equity, manageability and legitimacy. How do TDR programs measure up?

Effectiveness

Does the governing tool achieve its intended objectives? This is the most fundamental question that must be asked. As previously mentioned, there are essentially two goals for TDR programs: preservation and compensation. The most highly touted programs do well at preserving land and the preservation is, by and large, permanent. However, even the model program in Montgomery County, Maryland has hit a few snags in terms of compensation. Due to a lack of receiving area demand, farmers in the sending areas that still hold development rights find them worth a lot less than when the program started.

Efficiency

Are the results achieved at a reasonable cost? Again there are two ways to examine the efficiency of TDR programs. One is administrative costs. The other is the cost of preservation. Administrative costs can be somewhat higher than under traditional zoning. Markets must be formed and monitored. TDR credits must be created and administered. Also, there are no savings over traditional planning techniques since a comprehensive plan and complete set of zoning rules must already be in place for TDR programs to work.

On the other hand, sometimes the only way to preserve land or historic places is by buying property or development rights. That is impossible for many cash-strapped local governments to do with public funds. TDR programs allow private money to be used to achieve those goals.

Equity

Are TDR programs basically fair and do they redistribute resources to people who need them? TDR programs try to spread the wealth of development by allowing landowners, especially farmers who equate their ability to develop their land with their retirement, to recoup their investment. To achieve this, the sending and receiving areas must be built properly to make sure that TDRs remain valuable. Otherwise, landowners in sending areas will find their TDR credits worthless and their land still unable to be developed.

However, creating value for landowners in the sending areas creates another equity problem for those in receiving areas. Residents of the receiving areas may not want the higher density development. This problem is particularly severe when the receiving area is an already existing suburb.

Manageability

Creating TDR markets can be a complex task. Decisions must be made to set up sending and receiving districts, underlying zoning, density planning and credit ratios. Some programs also require government-run TDR banks. Every choice affects the demand for TDR credits, their price and the success of the program. As the number of successful models increase, manageability should become easier, but it remains a complex task.

Legitimacy and political feasibility

A TDR program, with its inherent goal of compensating landowners, is naturally more politically palatable than typical command and control zoning regulations. However, any kind of land use restriction generates controversy. Municipalities must build community support for the projects (Johnston and Madison, 1997). Successful TDR programs cannot be created by the will of an agency. Political legitimacy must be built over time.

For example, successful TDR programs typically have a pre-existing constituency built around the need for land use controls. In Montgomery County Maryland, the Planning Commission had extensively studied farmland economics. In Lake Tahoe, local residents faced an indisputable decline in water quality. In New Jersey's Pinelands program, the TDR program was the latest effort in a longtime farmland protection program (Johnston and Madison, 1997). Public education and buy-in are vital.

Conclusions

As policy makers continue to search for ways to use the market as a governing tool, local governments will continue to consider transfer of development rights programs. TDR programs can be effective, equitable governing tools that make zoning more politically feasible. These programs offer two key benefits to local governments: they compensate landowners for lost property value due to zoning, and they use the market to pay for the preservation of public goods.

However, these programs can be costly and difficult to administer compared to typical zoning. Local governments must oversee (or contract out) regulation of the market, complex operation for such an unusual good. Even with education and program marketing efforts, communities may not support TDR programs, especially when they are on the receiving end of increased density. Lastly, TDR programs usually protect land or buildings on a permanent basis. This is both an advantage and a disadvantage of this tool.

Communities should be aware that a TDR program is not a substitute for planning and zoning, rather TDR programs require strong zoning. Therefore, they may not provide a sure-fire way to avoid friction over property rights issues, although some innovative communities have designed their programs to lessen the likelihood of takings conflicts.

TDR programs will be most effective in communities facing strong development pressure, where officials believe it would be difficult to successfully implement traditional zoning restrictions to achieve preservation goals or where financial resources are not available for municipalities to buy land or development rights on their own. Montgomery

County, MD offers the best example of how a community with these characteristics has formed and implemented a successful TDR program.

Despite its potential as a land use tool, transfer of development rights programs have been slow to catch on in communities. While there have been some visible successes, there have been many places where the schemes fail for one reason or another. So while policy advocates push transfer of development rights programs, it is likely that pragmatic local government officials are still reluctant to take the lead.

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- [1] Downzoning: The practice of reducing the zoning of a property from a more to a less valuable use (e.g. from commercial to residential or from residential to agricultural.)
- [2] TDR bank: A market regulation tool in which governments directly purchase development rights from landowners at a set price and then sell the development rights to developers in the future.
- [3] Adequate Public Facilities Ordinances (APFO) require that sufficient infrastructure, such as water and sewer services, be in place before any development construction can commence.