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**Mitigating the Impacts of Measure 37:
Implementing a Statewide Transferable Development Rights Program in Oregon**

Mary L. Grothaus
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Institute for Portland Metropolitan Studies
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“The land belongs to the future.”

-Willa Cather (1913)

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The George A. Russill Fellowship

The Russill family established the George A. Russill Fellowship in 2001 to research the potential for non-regulatory land use planning tools to meet habitat conservation goals in the Portland metropolitan area after Measure 37. The Fellowship is administered by The Oregon Community Foundation, founded by community leaders in 1973 to guide philanthropists in charitable giving. The Institute of Portland Metropolitan Studies, located in the Center for Urban and Public Affairs at Portland State University, hosts and provides guidance to the Fellow.

This paper follows directly from that of the 2005/06 Russill Fellow, Ted Reid, entitled *Planning in the Portland Metropolitan Area after Measure 37*. Reid concluded that non-regulatory land use planning tools can be effective for achieving statewide planning goals, but only in a regulatory context. Measure 37 makes that regulatory context problematic, with planners' flexibility in making regulatory changes stymied.

To conserve wildlife habitat after Measure 37, Oregon's planners need to turn to these non-regulatory tools. One such tool is transferable development rights (TDRs). TDRs equitably preserve the ecosystem services of rural lands and promote efficient land use patterns. A rural property owner "transfers" her development rights to an urban developer by placing a conservation easement on her property and accepting payment from the developer, who profits from development bonuses. This payment could be declared compensation under Measure 37 and could mitigate the Measure's potential development impacts.

Measure 37

“Government must pay owners, or forgo enforcement, when certain land use restrictions reduce property values” (State of Oregon). Sold to voters as a long-awaited intervention into an inequitable land use planning system, Measure 37 passed in Oregon’s November 2, 2004 election with 61% of the vote. Four months after the election, only 54% of Oregon voters still supported Measure 37 (CFM, 2005). By January 2007, only 37% supported it; 38% wanted a fix; and 23% wanted Measure 37 repealed (Moore, 2007).

In the meantime, rural property owners have swamped the state with 7,500 Measure 37 claims affecting 750,000 acres of land. Claimants requested 60,000 lots (for the 42% of claims for which data is available); 20% of these claims are for large residential developments of over 500 lots. Claimants also requested \$13 billion compensation (for the 67% of claims for which data is available). Oregon’s jurisdictions are incapable of paying all approved claims and have begun to waive regulations instead (Martin, 2007).

Measure 37’s recent downturn in popularity demonstrates that the potential impacts of “[forgoing] enforcement” are unacceptable to most Oregonians. Waiving regulations protecting rural lands from development undermines Oregon’s statewide planning goals. Development resulting from Measure 37 claims threatens the ecological and economic integrity of Oregon’s agricultural lands (Goal 3), forests (Goal 4), natural resources, scenic and historic areas, and open spaces (Goal 5), and air, water, and land resources (Goal 6).

Waiving regulations introduces new inequities into Oregon’s planning system. Measure 37 claimants are limited to property owners who acquired their properties before the regulations went into effect. While this restores fairness to one group of property owners, it is unfair to rural property owners who purchased their properties after land use regulations went into effect with a

guarantee of the preservation of the rural landscape. Intertwining agricultural and residential land uses can permanently change the look and feel of a rural landscape or create conflicts (over pesticides and dust, for example) that can decrease a farmer's profits or the livability of a rural community.

Waiving regulations is also unfair to Oregonians who must pay the costs of sprawl. Economic costs include higher taxes to support the diseconomies of scale of sprawling infrastructure and loss of small businesses and town centers as auto-oriented commercial developments open to support the new centerless population. Quality of life costs include increased traffic, loss of outdoor recreational space, and the health effects of increased air pollution and a sedentary lifestyle. Environmental costs include loss of permeable surface, loss of species biodiversity, and increased energy use.

Land Use Stories

The dichotomy of opinions surrounding Measure 37 is best described as a modern reiteration of Oregonians' long struggle to balance private rights and public goods. This paradox was born in the West, where individuals learned to value their freedoms but where the Federal government controlled most of the land. More than half (56%) of respondents to a 2005 survey value private rights over public goods. But more than half (70%) also place higher importance on protecting land for future needs than developing land now; and 69% believe that public planning, rather than market mechanisms like the demand for rural subdivisions, should guide such land use decision-making. Additionally, 64% think that protecting farmland is very important; 61% and 58% think protecting the environment and protecting wildlife habitat (respectively) are also very important (CFM, 2005).

This presents a challenge for planners who must continue to meet Oregon's statewide planning goals with a vigilant eye towards regulatory equity. The public sector, seeking for Oregonians the protections for farmland and natural areas most want, cannot, under Measure 37, continue to rely on regulation as the primary conservation tool. Planners need new tools to mitigate the impacts of Measure 37 and to ensure regulatory equity after that. Understanding the viewpoints of claimants and neighbors of claimants, who represent primary stakeholders in this process, can help policy makers find effective tools for this task.

Claimants likely place higher importance on private rights than on the public good. They believe that they are entitled to a bundle of property rights including the right to develop their properties as they wish. For many rural property owners, subdividing into residential or mixed residential lots provides the highest return on their land; having purchased their land before 1973, claimants perceive subsequent regulations preventing such development to be unfair takings. While one could defend this position from a more symbolic standpoint, Measure 37 appealed to voters with the economic argument that regulation reduces property values.

It is commonly thought, and perpetuated by property rights advocacy groups, that Oregon's land use regulations have lowered the value of private property in Oregon by as much as \$5.4 billion per year (OSU, 2007). Under this model, when properties are incorporated into an urban growth boundary (UGB), they increase in value because of realized development potential; similarly, when properties are zoned for non-development uses such as exclusive farm use, they decrease in value (or fail to increase in value) because they can never be developed.

Current research consistent with mainstream economic theory suggests that the above model is not true. A June 2007 report from Oregon State University shows that after 1973, property values of Oregon's regulated lands have grown at the same rate as the values of

Oregon's unregulated lands; it also shows that property values in Oregon and Washington, a state with weaker land use regulations, have grown at similar rates (Jaeger & Plantinga). A 2007 Georgetown University Law Center report agrees, and also finds that values of agricultural land in Oregon have risen at similar or faster rates than those in neighboring states, which all have fewer laws regulating agricultural development (Echeverria).

Jaeger and Plantinga argue that the three potential effects that regulations have on property values – restriction effects, amenity effects, and scarcity effects – offset each other and do not lead to an overall reduction in value of regulated properties. Also, many additional non-regulatory factors can affect the value and the change in value of any given property. Therefore, a Measure 37 claimant whose property has not been de-valued by regulation could experience windfall gains if regulations governing her property are waived (Echeverria, 2007).

Neighbors of claimants, non-claimants themselves, likely accept this latter model. Unlike claimants, they may place higher importance on the public good than on private rights, believing that the public sector creates those rights and thus creates private value. Regulation protects what these neighbors value in their rural lands. Under this paradigm, Measure 37 restores fairness to one group of property owners (claimants) but unfairly “[affects] the intrinsic and economic value of [claimants’] neighbors’ properties” (Martin, 2007).

These stories demonstrate the diversity of needs that Oregon's planners must meet. Tools that planners implement to mitigate Measure 37's potential development impacts must provide equity to claimants as well as to neighbors and other Oregonians. They must straddle the gap between the public and private domains, respecting the right of the first to a well-planned state and the latter to the economic use of property.

Mitigation Strategies

Tools that are available to planners to maintain desirable growth trends while avoiding regulatory backlash include subsidies and incentives, purely voluntary programs, and market-based mitigation (Reid, 2006). Market-based mitigation strategies directly address Measure 37 claimants' equity concerns by compensating private property owners for the public goods that their land provides; it gives the government a way to economically, as well as symbolically, value rural lands. They are based on the premise that private land, as well as public land, performs ecosystem services, or benefits that human beings derive from a functioning ecosystem, and that these services should be valued in the marketplace in order to ensure their preservation. Such services include pollination, carbon sequestration, food production, and groundwater recharge.

Market-based conservation tools include the purchase of conservation easements, carbon credit trading, and stormwater credit trading. One market-based tool that could effectively mitigate the negative impacts of Measure 37 by providing compensation to claimants with a revolving door fund is transferable development rights (TDRs), also known as transferable development credits (TDCs).¹ Like the other market-based tools, this is a truly a hybrid market-based and regulatory tool.

TDRs are a fairly simple concept – implementation is a bit more complicated. TDRs transfer density from *sending areas* where communities do not want development into *receiving areas* where communities do want development. A property owner in a sending area sells development rights to a developer in a receiving area; the property owner then records a deed restriction on his property, permanently limiting developing through a conservation easement,

¹ The distinction between these terms appears to be symbolic. Transferable development “rights” implies that property rights are inherent, not granted. Transferable development “credits” implies the opposite. I use the first term because it is more common.

and the developer receives a development bonus to build additional units or exceed Floor Area Ratio (FAR), for example.

A statewide TDR program could mitigate the impacts of Measure 37 by compensating claimants for transferring their development rights to places where development is consistent with Oregon's land use planning goals. This provides equity to rural property owners concerned that the state's planning system has disregarded their private property rights. This also provides equity to Oregonians by preventing sprawl. Additionally, such a program could be a useful tool for long-term, non-Measure 37 planning in Portland.

Implementing a Successful TDR Program

Oregon should maintain its high standards for innovative and successful planning if and when it develops and implements a statewide TDR program. Research shows that there are some common elements shared by the most successful of the nation's 172 TDR programs. Planners should consider these elements while tailoring the program to work well under Oregon's unique planning atmosphere.

These eight elements of success – regulatory framework, inter-jurisdictional transfers, TDR banks, ideal sending areas, ideal receiving areas, valuation, support, and monitoring and adjustment – contradict and complement each other and planners must balance them. Rick Pruetz, AICP, a national TDR expert, identified and outlined many of these elements in his book *Beyond Takings and Givings*, which planners nationwide use as a guide for establishing TDR programs. For each element, I will provide an example of a community with a TDR program that excels in that element and predict how the Oregon community might implement that element

in a statewide program. Later, I will go into more detail about the successful selection of receiving areas, one element that presents a unique challenge in Oregon.

Regulatory Framework

One element of a successful TDR program is a regulatory framework in which the program can operate. Regulations are necessary to enable and incentivize developer and property owner participation. For developers to participate in a TDR program, the zoning code must create a need for them to buy development rights to exceed baseline density and build at the desired density. If the zoning code already allows developers to build to the desired density, or if it awards them development bonuses through other means such as providing amenities, they have no need to buy the rights and the program will not function.

Likewise, for sending area property owners to participate in a TDR program, the zoning code must grant them more rights than the amount of development existing on their properties. Other regulations that establish roadblocks to development, such as mandatory environmental mitigation, can also incentivize a property owner to participate.

Some jurisdictions change their regulatory frameworks to enable and incentivize developers to participate in the program by downzoning receiving areas. Planners anticipate the market demand for development in an urbanized receiving area and downzone to a limit below the desired density. Then, to build at the desired density, the code requires developers to purchase TDRs. Some planners avoid downzoning, fearing that developers will not purchase TDRs and thus will not build receiving areas to the desired density. This demonstrates the importance of choosing proper receiving areas (discussed below). Similar is the worry that some

developers will purchase rights and some will not, creating an illegible landscape. But the additional height that a development bonus might award would not be enough to have this effect.

Changes to the zoning code in the opposite direction are also common in TDR program implementation. Planners upzone less urbanized receiving areas that are targeted for increased urbanization and density, such as Metro's Urban Reserves or a new town center, before the development plan is implemented. The base density is established below the desired density and developers must purchase development rights to build at the desired density; or, the base density is the desired density and developers must purchase rights to build at all.

Jurisdictions also change their regulatory frameworks to enable and incentivize property owners to participate by upzoning or downzoning sending areas. Planners upzone sending areas where properties are already developed to the maximum allowable density. The new code then requires the property owners to transfer and not realize these rights. Or, planners downzone sending areas where development is unwanted and compensate property owners with the purchase of their development rights. The latter can present legal challenges from property owners who view this as a taking, but the Supreme Court implied in *Suitnam vs. Tahoe Regional Planning Agency* that the purchase can be just compensation (Reid, 2007).

San Francisco is one example of a jurisdiction that updated its regulatory framework to incentivize participation in its TDR program. The City's 1985 plan called for preservation of 253 historically and architecturally significant buildings. New regulations made it very difficult to destroy one of these buildings, designated as sending sites in the new TDR program. New regulations downzoning the downtown receiving sites and limiting alternatives to dodging regulations also made it impossible for developers to build at the desired density without purchasing TDRs (Pruetz, 2003).

Regulatory changes, while convenient, do not typically promote equity in planning and may induce regulatory backlash. Downzoning receiving areas is problematic and perhaps impossible in the current planning atmosphere in Oregon because Measure 37 would require the government either to compensate property owners for the loss in value associated with the new regulation or to waive the regulation. Even in other states, planners question the equity of making developers pay for what they used to get for free. But, as many developers concede, they can afford it, and it may actually make their vocation more equitable because they are paying more of the true costs of their development.

In Oregon, there is a more fitting solution for incentivizing participation from developers than downzoning receiving areas: choosing receiving areas where there is already an existing or anticipated demand for developing beyond the base zoning. Then planners can avoid downzoning urbanized receiving areas and can account for TDRs when they upzone less urbanized receiving areas. I discuss receiving areas in more detail below.

Inter-jurisdictional Transfers

A second element of a successful TDR program is the inter-jurisdictional transfer of development rights. This allows a property owner in a sending area to transfer her development rights to a developer in a receiving area that is in another jurisdiction. The purpose of this is to create a larger, more suitable group of sending and receiving areas that will help the program achieve regional and local planning goals rather than be minimally utilized within a single jurisdiction. Such goals may include maintaining a low population density and a resource-based economy in an entirely rural county with fertile agricultural land; without inter-jurisdictional transfers, this county could not participate in and benefit from a TDR program.

While not all successful TDR programs allow inter-jurisdictional transfers, this would be critical in the context of Measure 37. A claimant with development rights on a property in a rural county could not effectively transfer these rights within that rural county if no urbanized receiving area existed. Transferring density from rural to urban areas rather than within rural areas is consistent with Oregon's statewide planning goals and regionally oriented planning processes.

There are two different types of inter-jurisdictional transfers that Oregon planners could include in a statewide TDR program: mandatory and voluntary inter-jurisdictional cooperation. The Pinelands Comprehensive Management Plan (CMP), in the New Jersey Pinelands in the southeastern quarter of the state, mandated that the Pinelands' seven counties and 53 local jurisdictions update its plans and codes to implement the Pinelands Development Credit (PDC) Program. The program has successfully preserved 48,000 acres since 1980 (Pruetz, 2007).

The Pinelands Commission adopted the PDC Program as part of the CMP to protect the area's agricultural and natural resources, habitat, and water quality. The PDC Program was a regional solution to a regional problem: one million acres of forests, swamps, and berry farms in the Pinelands threatened by vacation and retirement home development driven by the casinos of Atlantic City (Pruetz, 2003). Property owners in three preservation and agricultural planning districts created by the CMP can choose to sell Pineland Development Credits to developers in designated growth areas, conserving the ecologically sensitive land and increasing density in urban areas (Pruetz, 2003).

One example of a successful program using voluntary inter-jurisdictional cooperation is the Boulder County Transfer of Development Rights (TDR) Program in Boulder County, Colorado. Planners implemented the program to protect rural lands bridging the Great Plains

and the Rocky Mountains from the sprawl of Denver, whose downtown lies 15 miles to the southeast of the county line. In 1994 they updated Boulder County's clustering technique, non-contiguous non-urban planned unit development, which awarded extra density to developers who placed a conservation easement on 75% of their land, to allow transfers (Pruetz, 2003).

The Boulder County TDR Program allows incorporated cities and towns in Boulder County to enter voluntarily into inter-jurisdictional agreements with the County to accept transfers of development rights from unincorporated areas of the County. These agreements are separate programs that comprise the Boulder County TDR Program (Pruetz, 2003). The Program has preserved 5,900 acres so far (Pruetz, 2007).

The first inter-jurisdictional agreement in the Boulder County TDR Program was between the County and the City of Boulder, allowing property owners in unincorporated Boulder Valley to transfer development rights into the adjacent City of Boulder. One important element of this agreement, which illustrates an advantage of the Boulder County TDR Program, is that each receiving area is adjacent to or nearby its associated sending area. This motivates residents to participate in the program because they can see the benefits of preserving open space at the expense of increased density in their neighborhoods (Pruetz, 2003). However, planners should weigh the advantage that this motivation provides against the advantage of a larger program, more efficient in both administration and in preservation of regionally critical landscapes. The first model more closely fits Oregon's current planning environment.

In Oregon, we need an inter-jurisdictional program first to mitigate Measure 37 impacts and second to meet state planning goals. Development rights granted to Measure 37 claim properties on prime agricultural lands might more appropriately be transferred into urban areas such as Portland or even into towns within the same rural counties rather than into other

unincorporated areas of the county. The state would see more transfers if it mandated that all jurisdictions update their codes to implement the program. This may be more controversial, but many jurisdictions are likely to support a statewide program because they do need a tool to mitigate the impacts of Measure 37.

There are currently no TDR programs in Oregon that allow the inter-jurisdictional transfers of development rights. The state's most widely used TDR program is the Deschutes County Transferable Development Credit (TDC) and Pollution Reduction Credit (PRC) Program. The Program redirects development from an unincorporated community called La Pine where septic systems threaten to pollute the area's groundwater with nitrate to a nearby Neighborhood Planning Area that will be served by sewer infrastructure. A property owner in the sending area can earn a development credit when she agrees not to install a septic system on her property. Planners recently updated the program to make it more effective by granting a PRC to a property owner in the sending area who updates his septic system with pollution reduction technology. Developers need a TDC or PRC to build in the Neighborhood Planning Area. This strategy has been successful in building a new neighborhood but not as successful in preventing groundwater pollution (Morrow, 2007; Pruetz, 2005).

Deschutes County might benefit from taking a broader regional approach to solving the regional problem of groundwater pollution. The County's forests and deserts face growth pressures from the recreational haven of Bend as well as from the 185 Measure 37 claims affecting 15,250 acres that property owners in the County have filed, asking for \$850 million compensation (Martin, 2007). If Deschutes County were to broaden its TDC Program to allow inter-jurisdictional transfers, the County might better be able to maintain its distinctive character that draws tourists to it from Oregon and all over the country.

Catherine Morrow, Deschutes County Planning Director, explained at a May 10th 2007 workshop in Portland that the program was not as effective as planners had hoped in part because the complexity of the program frustrated potential participants and made the future goals seem unattainable. If the program were instead part of a broader, inter-jurisdictional program, administration could be more efficient, and it may be easier for participants to see the far-reaching benefits of their transfers. Towns like Bend, Medford, and Sisters could accept higher densities in exchange for the preservation of the landscape and its ecosystem services in the surrounding rural area.

There are several other intra-jurisdictional TDR programs in Oregon. One is Clatsop County's Density Transfer Standards, designed to preserve open space within the Clatsop Plains Planning Area. No transfers have yet occurred in this program. Oregon's other programs are in the City of Portland's Central City, South Waterfront, Johnson Creek, and Northwest Hills Planning Districts. These programs are intentionally limited in scope, designed to achieve very specific planning goals.

The purposes of the Central City program are primarily to preserve single room occupancy housing and to offer developers greater flexibility. This has been moderately successful – developers transferred rights between properties in the Brewery Blocks, for example. Transfers have also occurred in the South Waterfront District, giving developers more flexibility and preserving urban open space for future residents. The Johnson Creek Plan District allows transfers from environmentally sensitive lands to areas of planned development within the same District. This program has not been very successful because the District is not an ideal receiving area: there is limited developable land and thus a low market demand for development. The TDR program in the Northwest Hills Plan District is not successful because it was

implemented to address a particular 2,000 acre parcel eventually sold to Metro's Greenspaces Program after negotiations over the value of the development rights fell through.

Gil Kelley, Planning Director for the City of Portland, indicated at the May 10th workshop that the City's upcoming Comprehensive Plan update would provide a great opportunity for planners to adjust these programs to be more successful and to evaluate inter-jurisdictional possibilities. Programs that are more limited in scope are less likely to be successful because there are fewer sending and receiving area sites with less diversity between the sites. An inter-jurisdictional TDR program in Oregon might be modeled after other regional programs like that in Boulder County, or it might represent an innovative approach.

TDR Banks

A third common element of successful TDR programs is a TDR bank. A TDR bank buys development rights with seed money and sells them to developers at a later time. TDR banks receive seed money from sources such as state or county funds, loans, or bonds. This seed money funds initial TDR purchases, after which TDR sales fund further purchases. This revolving door fund is unlike property acquisition preservation tools, where buyers must find more money each time they make a purchase. Jurisdictions can authorize a non-profit organization or a regular bank to act as a TDR bank, or they can create the bank. Regular banks are motivated to participate by the profit they make while holding the TDRs.

Using a TDR bank has several advantages over relying on individual transfers in the private marketplace. First, a bank allows buyers and sellers of TDRs to take advantage of market downturns and upturns because it allows them to enter the market at any time: a buyer does not have to wait until a seller chooses to sever her development right in order to purchase one.

Second, it can establish and stabilize values for TDRs, guiding trading on the private market. This allows buyers to account for TDR prices when planning new development projects and makes it easier to adjust values for maximum participation. Third, it can increase administration efficiency in large regional programs by tracking paperwork and potential clients. Finally, a TDR bank can motivate planners and participants because it shows a strong commitment to making the program work. Many of the country's most successful programs have TDR banks (Pruetz, 2003).

One successful TDR program that uses a TDR bank is the Cambria Transfer of Development Credits (TDC) Program in San Luis Obispo County, California, part of the County's Local Coastal Program (LCP). The California Coastal Commission, the California Coastal Conservancy, San Luis Obispo County, and the Land Conservancy of San Luis Obispo County collaborated to develop this program with the common goals of protecting habitat for the Cambria Pine and Monterey Pine and preventing development on the prime habitat and steep slopes of Lodge Hill and Fern Canyon in Cambria (Pruetz, 2003).

San Luis Obispo County authorized the Land Conservancy to act as TDC bank: the LCP mandates that a public agency or non-profit facilitate the dissemination of information, the recording of easements, and the buying and selling of TDCs. The Land Conservancy has doubled the \$275,000 in seed money that the California Coastal Commission loaned to them and has recorded easements on over 230 lots (Pruetz, 2003).

Another example of a successful TDR program that uses a TDR bank is the Pine Barrens Credit (PBC) Program in the Long Island Pine Barrens, an undeveloped area of forests, marshes, streams, and ponds on the eastern end of Long Island. The State of New York, Suffolk County, and three townships created the PBC program in 1995 to protect sensitive habitat for endangered

and threatened species and to protect the cleanliness of the aquifer that provides drinking water to Long Island inhabitants (Pruetz, 2003).

The PBC program created a bank called the Pine Barrens Credit Clearinghouse. The Clearinghouse has several functions. First, it records easements on sending area properties. In this process, it receives applications from property owners and notifies the applicants of the number of PBCs allocated to their properties in Letters of Interpretation. It then receives proposals for conservation easements based on those PBCs and approves or denies them, and issues PBC Certificates to property owners as proof of the recorded easements (Pruetz, 2003).

A second function of the Clearinghouse is to buy PBCs directly. The State Natural Resources Damages Account loaned the Clearinghouse \$5 million in seed money that the Clearinghouse must repay only if it is terminated. Its Board of Advisors establishes the prices of PBCs. If property owners do not sell PBCs to the Clearinghouse, they sell them to buyers that they find on lists provided by the Clearinghouse or through a real estate broker (Pruetz, 2003).

Currently, none of Oregon's TDR programs use a TDR bank. TDR banks might not be necessary for the state's small programs where few transfers are taking place. However, a TDR bank would be more necessary for a large statewide program in Oregon. If policy makers established and funded the bank at the start of the process, it would provide an efficient, streamlined process for buying and selling TDRs and would demonstrate Oregon's commitment to preserving land with this planning tool.

Ideal Sending Areas

A fourth success factor for TDR programs is the proper identification of sending areas. In many environmentally oriented programs, this is as easy as drawing a line around a natural

area with poor environmental conditions that planners design the program to retroactively reverse. In other cases, however, the program is designed to proactively preserve land before ecological or health problems emerge. It is the latter situation that is of primary interest to Oregonians.

One example of a proactive TDR program is the Montgomery County TDR Program in Maryland. This program represents the most recent tool used in the County's fifty year effort to protect farmland from the sprawl of Washington, D.C., just to the southeast. Montgomery County planners designated as a sending area a 90,000 acre Rural Density Transfer (RDT) Zone they created from the Agricultural Reserve. The RDT zone was thus prime agricultural land threatened by immediate development and represented an ideal sending area.

The identification of sending areas for a statewide program Oregon would be proactive also, as it would aim to preserve ecologically significant lands in rural areas before development from Measure 37 reverses 35 years of land use planning. Because of our unique land use planning circumstances, policy makers are interested in implementing a statewide TDR program first and foremost to mitigate the potential impacts of Measure 37; thus the sending areas will be properties with approved Measure 37 claims. Measure 49, going to the ballot in November, would establish TDR purchases as compensation under Measure 37 (see the discussion of legal considerations below).

Because there are 7,500 Measure 37 claims for over 60,000 lots and far fewer possible receiving sites, transferable rights would have little value if granted to all approved claimants. Planners will have to prioritize the designation of claim sites as sending sites in order for sellers to receive fair compensation. The premise behind Oregon's land use planning system, and the

reason that planners oppose waiving regulations on all Measure 37 claim sites, offers advice to this end: there is value in rural land.

Ecosystem services is an increasingly common method that planners use to establish the economic value of the benefits that an ecosystem's functions provide to humans. A prioritization scheme based on ecosystem services value might be appropriate. The Bonneville Power Administration's habitat restoration values and Clean Water Services' temperature trading credits are both examples of successful implementations of ecosystem services valuation tools in Oregon. I will discuss these examples in more detail below in the context of TDR valuation.

Beyond meeting environmental goals, another factor in identifying sending areas is finding motivated property owners. Motivating sending area property owners to sell their development rights is typically a function of TDR valuation. However, some property owners are more motivated to sell than others, especially if they have no intention of developing their land. Measure 37 claimants would be motivated to sell TDRs because they would receive the just compensation for land preservation that they seek with Measure 37 claims. Selling TDRs would bring equity to these property owners. However, unlike directly compensating Measure 37 claims or waiving development regulations, this would also bring equity to claimants' neighbors and to Oregonians.

Ideal Receiving Areas

A fifth element of success is identification of receiving areas that are appropriate for development. Pruetz (2007) identifies four categories of receiving areas that planners should consider: urban infill, urban edge, rural town,² and new town development. Each category offers planners viable alternatives but achieves different planning goals and operates with different

² Pruetz calls this "rural residential."

incentives. I will discuss each briefly, and will elaborate on the opportunities and constraints that specific receiving area scenarios offer in a separate section below.

Urban infill development is the alternative most consistent with Oregon's statewide planning goals and Metro's 2040 Growth Concept. Urban area residents who fear the loss of open space in their neighborhoods may resist urban infill; stakeholder involvement and creative design solutions can ease this, improving livability with the addition of amenities and open space in plans.

An example of a TDR program with an urban infill receiving area is the King County TDR Program in King County, Washington. The County enacted a Growth Management Act in 1990, placing an Urban Growth Boundary around 460 square miles of urban land. Goals of the Act included the preservation of rural land for drinking water quality and salmon habitat. A 1993 TDR program with similar goals evolved over the years into an inter-jurisdictional program with a TDR bank that, with 92,000 acres preserved, is the most successful TDR program in the country (Pruetz, 2003).

One of the program's receiving areas is the Denny Triangle Urban Village on the north end of downtown Seattle. The area was ripe for revitalization, covered with parking lots and low-density development. Residents proved to be in support of their neighborhood's designation as a receiving area because they understood the importance of preserving rural land and because County funds and developer fees promised public amenity improvements such as greenstreets, parks, art and street furniture, and sidewalk improvements. Also, height bonuses that the program granted to developers did not threaten to block uphill neighbors' views of Lake Union beyond what the height limits in the zoning code would (Pruetz, 2003).

Urban infill in Oregon could occur inside any Urban Growth Boundary. All 240 cities in Oregon have UGBs, including the Portland metropolitan area. Portland neighborhoods within the UGB such as the South Waterfront, the River/Pearl District, Goose Hollow, the Lloyd District, and inner Southeast Portland are appropriate for development because they have the infrastructure and employment opportunities to support higher population densities.

Designating receiving areas on urban edges seems contradictory to statewide and regional planning objectives, but the fact that UGBs are in reality constantly expanding make them the most obvious choice due to the inevitable development that will occur there. Development on urban edges is preferable, however, to leapfrog development that might occur in rural areas beyond the urban edge without UGBs or TDRs.

An example of a TDR program with an urban edge designated as a receiving area is that in Snohomish County, Washington. Concerned about loss of farmland, open space, and natural resources, the County adopted a TDR Ordinance and designated the Stillaguamish River Valley as the sending area. In 2005, the City of Arlington became the receiving site for Stillaguamish River Valley development rights after Councilmembers voted to expand Arlington's UGB to accommodate a doubling in population while preserving rural land. Washington planners are now studying the agreement between the County and Arlington as a potential model for a regional TDR program (Pruetz, 2005).

In Oregon, Urban Reserves, lands that planners designate to enter a UGB, are ready-made urban edge TDR receiving areas. Planners could employ their customary process for designating Urban Reserves but take advantage of the upzoning that occurs when the land enters the UGB. TDR program language in the new code can mandate that developers use TDRs to build in the urban edge receiving area.

Rural town receiving areas can increase the population density in the town's center and can incorporate commercial and mixed-use development. Such receiving areas usually purchase rights from sending areas within the local jurisdiction to revitalize the community and protect its rural resources. It's similar to the idea of urban infill but on a micro, rural scale.

One TDR program that uses rural town receiving areas is the Calvert County TDR Program in Maryland. The program has preserved 13,000 acres of significant farm and forest lands by transferring density from Agricultural Protection Districts to Rural Community and Town Center Zones. One of the success factors of this program is that farmers in Calvert County generally intend to continue farming and TDRs allow them to invest in their operations.

Rural towns in Oregon, like rural towns nationwide, are threatened by telecommuter and tourist-driven sprawl. This sprawl destroys farms, natural areas, and community centers. A dense town center promotes walkability and community interaction, small business success, efficient provision of infrastructure, and ecological integrity. Increasing density within a rural town is more desirable than spreading growth throughout the surrounding area, but it is tricky because development in the surrounding area must be heavily regulated to convince a developer to purchase TDRs in order to build in the town center.

New towns, like urban edges, are obvious candidates for receiving areas since zoning changes are inevitable. If a new town is planned, mandating that developers purchase TDRs in order to develop there is thus highly feasible. New town development seems to contradict land preservation goals, but can reduce the impacts of growing tourist and commuter populations in rural lands by concentrating development into smaller spaces. New towns can be regional solutions to regional problems.

The Chattahoochee Hill Country TDR Program in Fulton County, Georgia, designated three new towns as receiving areas for development rights transferred from surrounding undeveloped lands. Part of a master plan written with extensive stakeholder participation, the program reflects Chattahoochee Hill Country residents' recognition of the need to protect their 40,000 acres of rural lands from Atlanta's sprawl (www.chatthillcountry.org). Planners have proposed transferring development rights from 4,000 acres of farmland to build Friendship Village, a new town of 6,000 dwelling units and one million square feet of non-residential space (Pruetz, 2007).

TDR programs should be implemented in plans for every new town in Oregon. New towns may be ideal receiving areas for TDRs in regions of Eastern and Southern Oregon that lack towns or cities. Infrastructure to support new town development is expensive, but if these areas are expected to grow this investment could be a valuable choice to prevent long term costs. In Western and Northern Oregon, new towns may not be ideal planning solutions because the population can be directed into existing urban areas where infrastructure and markets exist.

TDR Valuation: Prices, Allocation Rates, Development Bonuses, and Exchange Rates

A sixth element of success is proper TDR valuation. Planners can motivate property owners and developers to participate in the program through TDR prices, allocation rates, development bonuses, and exchange rates. These must balance each other and regulatory disincentives for developing sending area sites in order for planners to achieve the desired amount of activity in the TDR program.

The price of a TDR reflects the value of the development right to property owners and to developers. Therefore, the price depends upon what is associated with that TDR: property

owners seek a certain price per acre of deed-restricted land, and developers seek a certain price per expected profit. Planners thus cannot determine the price without considering the allocation rate and development bonus.

An allocation rate is the number of TDRs that a sending area property owner can sell for each acre of her land that is deed restricted with a conservation easement. The TDR allocation rate is based on the price that developers are willing to pay for one TDR and on the value of development on the sending area site. Pruetz (2003) offers the following example. If a developer can earn an extra \$10,000 from using one TDR, he may be willing to pay \$8,000 for that TDR. If a sending area property has the development value of \$2,000 per acre, then the allocation rate might be one TDR per four acres so that the property owner could sell the TDR to the developer for \$8,000 and receive exact compensation for that development value.

However, determining the allocation rate is not always this simple. The rate that will produce program activity depends on many factors that vary community by community. In communities where support for preservation is high, the allocation rate could be low and still motivate participation. Likewise, if support for preservation is low, the rate may need to be higher to motivate participation (Pruetz, 2003).

Also, since the allocation rate depends on the development value of the sending area property, allocation rates will differ between communities and within communities. Between communities, location and infrastructure may affect development values; within communities, zoning codes and physical constraints like soil condition and topography may affect values. Planners can ask appraisers to determine the development value of typical land in a community, or can even ask them to determine the value on a site-by-site basis; the latter is a more equitable

but more costly potential element of a TDR program. Or, planners can look at prices that land trusts paid for existing easements in a community (Pruetz, 2003, 2007).

The value of one TDR to a receiving area developer is captured in the development bonuses associated with it. Codifying development bonuses that will incentivize developers to participate in the program is an important part of the TDR valuation process. This works in tandem with the allocation rate and TDR pricing described above. A bonus could be the right to build an additional 1,500 square foot unit, an additional story, at a lesser setback, or with fewer mitigation requirements.

To determine the value of TDRs to a developer, planners can use appraisals. Or, they can compare local market conditions to those in jurisdictions with successful TDR programs and estimate the value. Finally, they can simply ask the developers what they would be willing to pay (Pruetz, 2007). A successful TDR program incorporates extensive stakeholder participation in the planning process in part to properly value TDRs.

Another aspect of TDR allocation and valuation to consider is the exchange rate. This is the ratio of the number of development units that a sending area property forgoes to the number of extra units that a receiving area property can build. It works in consort with the allocation rate, development bonuses, and pricing to meet overall program goals. If a TDR program exchanges development rights at a 1:1 ratio, there is no net gain or loss in development as a result.

Dade County's severable use rights (SURs) program, in effect since 1982, provides an example of how to successfully allocate development rights. The County, containing the Miami metropolitan area in its eastern half and 242 square miles of The East Everglades in its western half, designed its program to protect water quality, flood storage capacity, wildlife, and the

economy from the impacts of sprawling development. Sending area properties are located in the East Everglades and receiving area properties on urban edges.

The allocation rate granted to sending area properties in the Dade County program varies from one SUR per five acres to one per 40 acres, depending on the management area that the property is in. Lands closer to urban areas and most suitable for development have higher rates, while lands farthest from urban areas have lower rates. Program rules grant land covered by water zero SURs because it has zero development potential (Pruetz, 2003).

In a statewide Oregon program, TDR valuation schemes would also vary regionally and even locally. In the context of Measure 37, site-specific appraisal would be the most equitable alternative for the state to pursue. Allocation rates might be the same for all approved Measure 37 claim sites, but prices might differ depending on the real development value of a site. Likewise, development bonuses might all be the same within one receiving area but might differ between receiving areas around the state depending on the area's regional context.

There is an opportunity in Oregon to implement an innovative TDR valuation scheme based on compensating property owners for preserving the benefits of undeveloped land rather than on forgoing the benefits of developed land. Humans value these benefits that natural functions of undeveloped land provides to them, ecosystem services, so these benefits can be quantified. Oregon's Bonneville Power Administration (BPA) and Clean Water Services (CWS) quantified ecosystem value in their Wildlife Crediting and Thermal Load Credit Trading programs, respectively.

BPA, the Federal agency charged with selling power from Columbia River dams to distributors, must mitigate the impacts that the dams have on wildlife. Such impacts include destruction of habitat flooded during construction and reduction in fish populations blocked from

upriver spawning grounds. BPA quantifies these impacts as habitat units; one unit measures both quantity and quality of habitat and is based on the needs of individual impacted species. For each habitat unit BPA destroys, it permanently preserves another through property acquisition, conservation easement purchases, or public land restoration projects. As of 2005, BPA had preserved over 228,000 habitat units for \$87 million (www.efw.bpa.gov).

CWS is a public utility in Washington County charged with protecting water resources in the Tualatin River Watershed. Its temperature trading program, implemented by the Revised Temperature Management Plan, is a pilot for the Environmental Protection Agency's water quality trading program. Much as BPA purchases habitat units to prevent any net loss of habitat from their development activities, CWS purchases shade credits to prevent any net gain in water temperature from their storm water management activities (www.cleanwaterservices.org). 30% of the Tualatin River's flow is treated wastewater; CWS has shaded miles of the Tualatin River's riparian areas to offset the high temperatures (Cochran, 2007).

Both of these programs are based on the economic valuation of ecosystem services. In a TDR program, the value of a development right could equal the value of the land's ecosystem services. The value of preserving a given parcel would determine the allocation rate and price. Ecosystem services' value of a region or of a given parcel of land could also help planners prioritize sending areas from Measure 37 claim sites. Site with higher values that are providing humans more benefits from remaining undeveloped should be higher priorities for transferring rights and becoming permanently preserved.

Support: Leadership and Stakeholder Involvement

Support for a TDR program from leaders and stakeholders is the seventh element of success. Without leadership, jurisdictions might never consider TDRs as an alternative, as many policy makers and planners are unfamiliar with the concept or successes of transferable development rights. Committed and knowledgeable leaders should organize workshops, draft legislation, and initiate conversations with primary stakeholders at the start of the planning process.

Primary stakeholders include representatives from all jurisdictions that the program could involve, small and large property owners in potential sending areas, developers, bankers, environmental advocacy groups, and property rights advocacy groups. Their support is necessary for policy makers to sanction the program. Once this initial support is secured, planners can use a participatory planning process to explore incentives that will ensure that successful transfers take place. Stakeholders contribute unique stories that help planners design a successful program that meets diverse needs; they want the program to succeed after investing time in it; and they build further support by spreading the word to their peers and neighbors. For example, a developer or rural property owner who helps to design a TDR program is likely to purchase transfers because the program meets his needs and benefits him.

An example of a TDR program initiated by sending area property owners is the Calvert County TDR Program in Maryland. Planners adopted the program in 1978 to implement the County's Comprehensive Plan calling for preservation of farms and forests. An owner of property in the Farm Community/Resource Protection District can request that her property be rezoned to the Agricultural Preservation District and designated a sending area, which allows her to develop at a lower density but transfer development rights at a higher density. Property

owners favored the program because they wanted to continue farming and it provided the extra income some needed (Pruetz, 2007; 2003).

An example of a TDR program that developers strongly support is that in Burbank, CA. Burbank enacted strict density restrictions in the 1980s in order to prevent negative impacts of development such as traffic congestion in the area's neighborhoods. To give developers some flexibility within the regulations, planners implemented a TDR program that limits the overall level of development in Burbank but allows developers to build at higher densities in appropriate places by transferring rights from less appropriate places (Pruetz, 2007; 2003).

The Deschutes County TDC Program, discussed above, was born out of the Regional Problem Solving Process, an experiment in participatory planning. Despite this, the program is not as successful as County planners had hoped; they acknowledge that the process took so long that when they finally implemented the TDC Program as a solution, residents had lost sight of the significance of the groundwater pollution problem. This makes it difficult for planners to further incentivize program participation by mandating that all property owners update their septic systems to create PRCs to build the new neighborhood (Morrow, 2007).

Oregon is home to many leaders dedicated to implementing a statewide TDR program. Planners in Deschutes County and the City of Portland experienced with TDRs have much to offer planners in the rest of the state. Oregon policy makers, planners, and prime stakeholders have shared ideas at workshops such as "Planning and the Marketplace: Using the Marketplace to Achieve Conservation and Planning Objectives in Oregon's Dynamic Regulatory Environment," held at Portland State University (PSU) on May 10, 2007. This workshop was sponsored by PSU, the Institute of Portland Metropolitan Studies, the College of Urban and Public Affairs, Parametrix, Metro, and the National Policy Consensus Center. In neighboring

Washington State, organizations like the Cascade Land Conservancy have been instrumental in leading regional conversations, sponsoring workshops and gathering support.

Monitoring and Adjustment

The eighth and final common factor in successful TDR programs is monitoring and adjustment. This is a critical step in any planning process. When developing TDR programs, planners make assumptions as to the number of TDRs that interested sending area property owners will sell, the number that developers will buy, and proper TDR valuation. A system for careful monitoring of sales and purchases allows planners to see which elements of the program should be adjusted to meet program goals.

Many jurisdictions with the most successful programs have updated them multiple times. One such jurisdiction is Palm Beach County, Florida. The County designed its original TDR program in 1980 to prevent the loss of native vegetation communities. Nine years later, after only a single transfer, and again in 1993 and 1996, planners revised the program to increase participation. The new programs formulated new goals, downzoned receiving areas twice, limited alternatives to purchasing TDRs, increased development bonuses by varying amounts according to locations of receiving sites, established a TDR bank, and gathered additional support for the program (Pruetz, 2003).

Planners in Oregon, inheritors of a successful thirty-five year old land use planning system, are proficient at monitoring and adjusting, a final and necessary stage in a circular process that allows planners to apply lessons learned. Because this task does occur near the end of the planning process when funds may be low, only including a protocol for monitoring and

adjusting can ensure that planners fully and properly engage in this task. Oregonians' full commitment to a TDR program's success in the planning process can thus seal a program's fate.

Oregon's Opportunities and Constraints

A statewide TDR program in Oregon would be a groundbreaking use of an innovative planning tool: of the almost 200 TDR programs in the nation, none involve as large an area or as many jurisdictions. The success factors above, though, are universally applicable and they can guide Oregon's planners in implementing the program. One factor that will present a special challenge in Oregon is identifying ideal receiving areas: Measure 37 makes creating incentives through zoning changes difficult.

Oregon's codes allow a high maximum density in urban areas in order to promote growth patterns that are consistent with planning goals. Without Measure 37, planners could downzone receiving areas where they have predicted high demand for development at the desired density and require developers to purchase TDRs in order to build at that density. With Measure 37, if planners were to downzone, property owners could file claims. Planners need to provide developers with enough incentive to participate in a TDR program without downzoning. Alternatively, and preferably, planners should identify receiving areas that are built to maximum allowed density where there is an existing demand for additional development.

Because there is an existing demand for higher densities, the easiest receiving areas to identify in Oregon are urban edges or new towns where upzoning will inevitably occur. This allows planners to write the new zoning code with TDR program incentives in mind: they could allow density at the maximum marketable level only with TDR purchases. However, as I

mentioned above, the resulting development pattern would be inconsistent with planning and preservation goals.

Because there may not be an existing demand for higher densities, the most challenging receiving area to identify is urban infill. In urban areas, codes typically allow developers to build at the maximum desirable density. In fact, many developers are not even building at that maximum density. However, there are some urban areas where there is a demand to build at higher densities. Increasing density in already urbanized areas is more consistent with Oregon's vision for its future.

In any case, the more flexibility that a program offers developers, the more motivated they will be to participate. Development bonuses can be creative and unique, can differ between receiving areas, and can change if they are not inducing enough activity. Development bonuses can include additional units, increased height, increased FAR, or a loosening of other design standards that allow developers to follow a more form-based code. It is important to offer enough incentives so that developers will participate, but not to offer so much that the demand for TDRs outweighs their supply.

Scenarios

Possible scenarios for a statewide TDR program involve inter-jurisdictional TDR agreements between rural properties with approved Measure 37 claims with high ecosystem services value, designated as receiving areas, and adjacent or nearby receiving areas.

Lands inside Oregon's Urban Growth Boundaries (UGBs) are ideal urban infill receiving areas. Developers want to build within UGBs, but not necessarily at higher than allowed densities. Planners need to identify sites within UGBs where that demand does exist. In

Portland's UGB, demand exists in the South Waterfront District, downtown Gresham, and Portland's Central Business District (CBD). Each of these potential receiving areas would have different TDR valuation schemes, but might accept TDRs from the same nearby rural sending area in a single inter-jurisdictional agreement between Portland and Washington County, for example.

Many developers have realized they could have profited from building at higher densities in the Pearl District and do not want to lose the same opportunity in the South Waterfront. The South Waterfront is currently designated as a receiving area in the City of Portland's small TDR program, and several transfers have landed here. But the South Waterfront is also its own sending area: property owners are transferring these rights from within the Subdistrict, which does not help to achieve urban infill, but simply moves it around within the City's borders. Also, developers have numerous other ways to achieve development bonuses, such as providing middle-income housing or installing eco-roofs (Pruetz, 2005).

Towns like Gresham, within the UGB, may also be ideal receiving areas. Because Gresham's density limits are currently modest, developers have expressed a demand to build additional units in downtown Gresham. Gresham could benefit from increased density to define a clear town center that could well-serve a broad and diverse population.

Portland's CBD is an ideal receiving area because the office market there is currently expanding, according to a PSU publication. Vacancy rates have declined since 2003 with rising demand and limited new construction. With continued demand, developers could profit from building up to 500,000 square feet of office space before 2009. Many projects are now planned or underway in the CBD (Williams, 2007). Requiring developers to purchase TDRs in order to develop in the CBD is highly feasible.

Sending areas that could supply these potential urban infill receiving areas with TDRs are rural areas that surround the UGBs. Washington, Clackamas, and Multnomah Counties contain Portland's UGB; preservation of farm, forest, open space, and other rural lands is already a priority in these counties for planners, farmers, environmentalists, and others who value the rural landscape, and Measure 37 claims provide ready sending area sites. There are 902 Measure 37 claims in Washington County affecting 64,246 acres of land; in Clackamas County there are 1,049 claims affecting 33,121 acres; and in Multnomah County there are 187 claims affecting 4,024 acres (Martin, 2007). This is a huge number of potentially transferable development rights and would have to be prioritized as I discussed above. A program allowing claimants to transfer their granted rights into the UGB would provide equitable compensation under Measure 37 (if legislation allows it) and would be consistent with planning goals. In the absence of Measure 37 mitigation, land preservation in these counties would still be valuable.

The second type of receiving area to consider is urban edge. Urban Reserves, the areas on the urban edge that planners designate to enter UGBs, are ripe receiving areas because demand exists for increased density. While destroying valuable rural land, planners insist that urban edge growth is inevitable, with one million people now projected to live in the Portland area by 2035, and planned growth is the best alternative. As an additional advantage, regulatory changes responding to the demand for development are already planned in Urban Reserves. This makes it easier for planners to incentivize developer participation, and more importantly, it gives planners the opportunity to capture windfall gains that Urban Reserve property owners receive when their land is upzoned (Metro, 2006). This is equitable for property owners and Oregonians alike.

Metro expanded Portland's UGB in 2002 and in 2004 and will consider expanding it again in 2009. Planners have designated lands brought into the UGB as Urban Reserves through a comprehensive review process that includes environmental considerations. Before development begins in the reserve, Metro requires planners to develop a Concept Plan for the new urban area (www.metro-region.org). At this stage, TDRs can be included as a planning tool, with the purchase of rights necessary to develop there. In this planning process, market research and stakeholder participation can help planners to determine the optimum incentives to instigate developer participation and effectively preserve valuable rural land. TDRs should be one of few ways for developers to build at the desired density (Reid, 2007).

The Pleasant Valley Concept Plan and the Damascus/Boring Concept Plan are examples of Metro's UGB expansion process that could use the TDR tool both to compensate rural property owners for the ecosystem services their lands provide and to capture upzoning values. Metro decided to bring the Pleasant Valley into the UGB in 1998 to meet a demand for housing. The Concept Plan for the 1,532 acre community of 12,000 people includes a town center, walkable neighborhoods, parks and trail systems, two employment districts with 5,000 jobs, and greenstreet designs. Land use planning alternatives include a TDR program to transfer density from a 461 acre "environmentally sensitive/restoration area" (ESRA) to an adjacent "neighborhood transition design area" (Pleasant Valley, 2002).

The City of Damascus incorporated in 2004 after Metro brought the area into the UGB in 2002. The Damascus/Boring Concept Plan outlines goals and alternatives for the area's urbanization patterns and includes a new town center where developers will cluster mixed-use buildings to preserve open space. TDRs are not officially considered as a land use planning strategy. Following Pleasant Valley's example, the Damascus/Boring Plan might allow transfers

into the cities of Damascus and Happy Valley from surrounding sites with a high preservation priority.

Sending areas located in or near the Concept Planning Area would help to appease residents who could see the positive effects of increasing density around them. Some sending sites could be located in the Planning Area itself as a way to compensate property owners whose land was zoned for preservation instead of development (Reid, 2007). Other sending sites could be located outside of the UGB, on nearby lands with high ecosystem services value. Some of these sending areas might transfer rights into the urban core for urban infill development as well as to the urban edge due to the large number of claims.

Rural towns are a third option for receiving areas in a statewide TDR program. Increasing density in a rural town is likely to have similar economic and environmental benefits as increasing density in an urban town like Gresham. For a rural town to be an ideal receiving area, there must be a demand for development and funding for infrastructure. This demand exists in towns with tourism and recreation-based economies such as Bend, Sandy, and Newport. New economies in coastal towns like Coos Bay, where a shipping company is interested in constructing the West Coast's deepest seaport, also present likely candidates.

A fast-growing town like Bend, threatened by the negative environmental, economic, and quality of life impacts of sprawl, could be an ideal receiving area because of existing development incentives. There are 185 Measure 37 claims in Bend's Deschutes County, affecting 15,248 acres of land (Martin, 2007). Transferring granted rights from those properties into Bend's town center would preserve rural land and provide compensation to Measure 37 claimants such as investors holding large tracts of land. Preserving land around Bend may be easier than in other rural towns because visitors highly value the rural landscape, workers value

the money that this tourism brings, and residents' property values increase when land around them is preserved due to the amenity affect.

A final option for receiving areas in Oregon is new towns. Like urban edges, new towns provide planners opportunities to include TDR programs when making the customary regulatory changes. New code should require developers to purchase TDRs in order to build in the new towns. Most planners do not see the need to create new towns in Oregon, though they are a viable alternative to rural sprawl. The City of Damascus, newly incorporated as part of Metro's UGB expansion, and the La Pine Neighborhood Planning Area in Deschutes County are in effect new towns, the latter of which is being constructed with credits that developers purchase.

Next Steps

Equity is a goal that many planners strive for in their work. The passage of Measure 37 suggested that Oregon revisit equity issues in its regulatory approach to land preservation. With a political climate ripe for regulatory change, this is the perfect time to introduce a statewide TDR program. But before the program can start to mitigate potential development impacts of Measure 37, preserve thousands of acres of land, and propel Oregon along its pathway of innovative and exemplary planning, there is more work to be done.

Leadership

Discussed above as one of the TDR program success factors, effective and committed leadership is critical in the nascent stages of the program to mobilize the necessary support and organize the effort. Therefore, leaders will be responsible for making sure that they take the

State through the remaining steps necessary for this vision to become reality. There is a growing group of leaders in Oregon that includes TDR experts and primary stakeholders from governmental agencies, non-profit research and policy centers, and investment and development firms.

Stakeholder Involvement

Program development will benefit from broad stakeholder involvement, as outlined above. Stakeholders such as Measure 37 claimants, neighbors of claimants, planners, policy makers, and advocacy groups are able to offer unique insights that will bring to light as many different viewpoints as possible. This allows planners to design better programs that more closely meet the needs of diverse Oregonians. That the passage of Measure 37 took planners by surprise indicates they may have lost touch with Tom McCall's original vision of participatory planning, where rural Oregonians could have voiced their displeasure with the planning system.

Stakeholders can informally offer their opinions in public meetings, letters, or online forums, or can serve on one or more of the many committees that should form to work out the details of a statewide TDR program. Critical to include on these committees are regional and local planners and policy makers from counties with a high number of Measure 37 claims, developers from across the state, and Measure 37 claimants. These committees or work groups should have focused objectives but remain in clear and meaningful communication with each other throughout the process.

Investigation

A critical next step is a thorough investigation of TDR program mechanics, which a committee of leaders and stakeholders should undertake. This will invoke the elements of success: a review of the existing plans and regulatory framework; exploration of interested jurisdictions; establishment of a TDR bank; identification of ideal sending and receiving areas; and valuation of TDRs. The latter three tasks may require subcommittees comprised of stakeholders with specialized knowledge: bankers, developers, and economists, respectively.

Besides voluntary stakeholder participation, leaders could use established forums like The Big Look and the City of Portland's Comprehensive Plan update to meet some of the objectives of their investigation. At the moment, individuals interested in TDRs are scattered across the state, and such forums provide opportunities for consolidation.

Education

The best way to convince stakeholders to be involved in the planning process, pass legislation, enter into inter-jurisdictional agreements, and buy and sell TDRs is to educate them about the opportunities that a TDR program will offer to their communities. Leaders should host workshops across the state and invite Measure 37 claimants, neighbors of claimants, regional and local planners, developers, and property owners. Initial workshops could offer Oregonians some basic information about TDR programs and Oregon's possibilities.

Once programs are established, leaders should provide long-term support for potential participants and for planners. Workshops for residents could provide more detailed guidance about the benefits and mechanics of participating. Workshops for planners implementing TDR

programs could give the planners chances to share successes and failures. Continuous support might be offered from a TDR expert housed at a State TDR office.

Legal Considerations

The legal feasibility of a statewide TDR program in Oregon is not the focus of this paper, though there are several important considerations that I will mention. All TDR programs need enabling legislation to establish the legality of inter-jurisdictional agreements. In November, Oregon voters will decide on such legislation – a Measure 37 fix known as Measure 49. Measure 49 would make it easier for claimants to gain rights to build 1-3 units, but harder for claimants to gain the rights to build more. This bill would also enable transfers of development rights from approved claim sites to mitigate the impacts of Measure 49, defining the purchase of development rights as “compensation” for Measure 37 claims.

Programs also need to develop legal frameworks for enacting new regulations, writing inter-jurisdictional agreements, funding TDR banks, and identifying sending and receiving areas. Other legal considerations in TDR programs involve takings issues such as demonstrating a nexus between the preservation of sending areas and the requirement to purchase TDRs to develop receiving areas. Though some of these issues have been addressed in court, many more have not (Reid, 2007).

Pilot

A final step in this initial planning process is to launch a pilot program. If Oregon’s TDR program can succeed on a small scale, it will show its merits to the rest of the state. A pilot program might involve a single inter-jurisdictional agreement, or might be two programs and

involve two inter-jurisdictional agreements. The advantage of the latter is that it is a more controlled experiment, in case market factors or claimant or developer support are not as predicted.

An ideal pilot program may be between Washington County and the City of Portland. Planners in the City are ready to try TDRs to increase density and award development bonuses in the South Waterfront, Lloyd District, and possibly other areas. Planners in Washington County have also expressed interest in the program. The pilot could begin as soon as planners work out the mechanics of transfers between these two jurisdictions.

Conclusion

Transferable development rights offer equity to rural property owners. Equity means economically valuing the benefits that preservation of rural lands provides to society, just as Oregonians economically value the benefits that development of urban lands provides to society. By keeping their lands undeveloped, rural property owners preserve the ecosystem services that humans need to survive. Measure 37 presents a challenge for planners, but it also presents an opportunity to implement a new long-range planning strategy, a statewide TDR program, that recognizes the economic value of preserving farms, forests, and rural Oregon.

For this task we must find inspiration:

“Oregon is an inspiration. Whether you come to it or are born to it, you become entranced by our State’s beauty, the opportunities she affords, and the independent spirit of her citizens.

“Oregon is an inspiration even to those who do not come here to live. The story of the Willamette River – our ecological Easter – has evoked cries of hurrah! across the Nation and in distant parts of the world. And we have heard, along with applause for Oregon, lamentation for other states where progress has felled prey to expediency.

“You and I shouldn’t claim we love Oregon more than anyone else, but we do love this State as much as anyone. Our thoughts today and the deliberations to come must spring from our determination to keep Oregon lovable, and make it more livable.”

-Governor Tom McCall (1973)

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