12 Tradable development rights in the U.S.

AuQ16

Making zoning flexible through market mechanisms

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Introduction

In 1972, New York City amended its zoning ordinance to create a 'Special Park District' bounded by 60th Street, Third Avenue, 38th Street, and Eighth Avenue (French 1976: 592), an area that included two private parks in the expansive Tudor City complex. The parks – which lie at opposite ends of a bridge spanning a major thoroughfare and that were viewable by most of the residences in the 12-building Tudor City complex – were 'surrounded by tall apartment buildings (and formed) a key spot of greenery, light and air in one of the most densely built, and worst polluted, parts of Manhattan' (Marcus 1974: 79). About 40 years after the completion of Tudor City in late 1970, Fred F. French Investing Company, the property's owner and manager, sold the complex to a real estate developer, Ramsgate Properties. The sale included two mortgages covering both of the parks (French 1976: 594).

Ramsgate planned redevelopment of the area around the 42nd Street overpass that would either build atop or overshadow the parks to accommodate new office buildings (French 1976: 591). In response, the city established the Special Park District, placing the parks in an overlay where only incidental recreational facilities could be built, and making the two parks 'granting lots', from which the owner could allocate or sell the lost building rights to 'receiving lots' (owned by itself or a third party) in the district. By purchasing the development rights, a receiving lot owner could gain a 'by right' increase in floor area ratio (FAR) of 10 percent, or up to 20 percent with a special permit approval (French 1976: 592). Before completion of a transfer, the city planning commission chairman would be required to certify a plan for continued maintenance of the park at the owner's expense (French 1976: 592, 593). Shortly after the regulation passed, payment on the park mortgages ceased because the parks – now public and undevelopable – could no longer serve as viable security. French brought a suit challenging the constitutionality of the rezoning and seeking compensation for the taking (i.e. expropriation) of his land, and ultimately prevailed.

Around the same time New York City designated the Special Park District, New Jersey created the Pinelands Environmental Council to help manage preservation of the state's Pine Barrens, a forest area containing an aquifer critical to the water system of the northeastern U.S. In 1979, Congress established more than 1 million acres of the Pinelands as the first resource to be protected in its National Reserve program, which targeted places of 'ecological sensitivity, natural beauty, and cultural importance' (Gardner 1991: 198–199). In partnership with the federal government, the New Jersey Pinelands Commission would oversee a program to limit development and protect Pinelands resources by awarding Pinelands Development Credits (PDCs) to landowners who recorded permanent deed restrictions on their property in accord with a Comprehensive Management Plan (CMP). The Pinelands Development Credits would be sold through market exchanges to owners of land in designated Regional Growth Areas or to a public Pinelands Development Credit bank (Gardner 1991: 201).

Hobart Gardner owned a 217-acre (ca. 88-hectare) farm in the Uplands Agricultural Production Area in the Pinelands, an area in which the original Comprehensive Management Plan permitted one accessory agricultural dwelling unit per 10 acres (4 hectares). In 1987, Gardner was considering subdividing his property into several 10-acre 'farmettes', but a Comprehensive Management Plan revision that year – made because of concerns about overdevelopment of agricultural areas – significantly restricted Gardner's options, allowing only one residential unit for every 40-acre (16-hectare) tract (Gardner 1991: 205). Hobart Gardner – like the French Investment Company – claimed that these actions were an expropriation of his property without compensation and challenged the Pinelands program in state court, but lost. Near the end of this chapter, after we arm the reader with essential background knowledge, we revisit the divergent outcomes in these two cases.

These stories describe two transfer of development rights (TDR) programs, and together illustrate how rights transfers can be used to preserve land that is scarce or at risk of becoming scarce. They also show how the public interest in land preservation can come into conflict with private rights, and how the legal system resolves this tension. The scarcity in both New York City and New Jersey arose because of the existing or potential gap between the post-development value of land and its preserved value, an economic dynamic that – under pure market conditions – would promote the transformation of urban parks into massive skyscrapers, and the incremental degradation of a major natural resource that included wildlife habitat, prime agricultural land, and a massive freshwater aquifer.

The conditions that give rise to scarcity are not just present in the East Coast megalopolis. The more than 200 TDR programs in the U.S. – which span diverse institutional, socioeconomic, and geographic settings – reveal the need to manage scarce land and community resources as an omnipresent issue, even in a country that seems to have vast reserves of land (Nelson et al. 2012). TDR originated in the U.S., where the tool was initially used to permit the sale of unused air rights to adjacent lots under the original 1916

New York City zoning ordinance (Giordano 1987). Since then, multitudinous TDR transactions have protected hundreds of thousands of acres of land from more intense development, with millions more acres eligible for protection. Although in use for more than a century, TDR gained momentum as a leading tool of the Smart Growth movement and growth management more generally. Some of the more well-known and successful programs are found in cities and counties within states that have or had some type of growth management (e.g. Maryland, Washington, and Florida).

The chapter proceeds in six sections. First, we review the basic features of TDR programs and discuss the rationale underlying the use of this tool. Second, we describe the governance and implementation of TDR programs. Third, we address TDR effectiveness, highlighting some limitations in the tool and existing research about its efficacy. Fourth, we consider the issue of legitimacy. In the conclusion, we briefly discuss policy implications and future research directions. As suggested by our discussion so far, we focus on the U.S. TDR has been studied in other contexts, and we recommend the reader supplement our discussion with other sources for a comparative perspective (e.g. China (Wang et al. 2009); France (Renard 2007); Italy (Renard 2007; Micelli 2002); Germany (Henger and Bizer 2010); the Netherlands (Janssen-Jansen 2008); and Taiwan (Shih and Chang 2015)).

TDR: basic features and rationale

A TDR program creates a market system for the re-allocation of development rights, shifting entitlements from a sending lot (or parcel) to a receiving lot (or parcel). In a typical TDR program, a local government designates a sending area of land targeted for protection, and allows sending area landowners to sever and sell their development rights to landowners in designated receiving areas planned for growth. As Costonis (1973: 85, 86) notes,

> development rights transfer breaks the linkage between particular land and its development potential. . . (avoiding) the either/or dilemma because it both protects the threatened resource and enables the owner of the restricted site to recoup the economic value represented by the site's frozen potential.

The transfer of development rights can be voluntary (i.e. sending lot landowners have the option to use their right to develop or sell it for compensation) or mandatory (i.e. regulations such as zoning limit or prevent further development of a parcel such that economic benefit can only be realized through a transfer). Once removed, usually permanently through a conservation easement recorded with the property title (Juergensmeyer et al. 1998: 446, 447), development rights can be sold for eventual use on other land, to a third-party landowner or a public TDR bank that brokers transfers among private landowners. Rights can also be shifted among properties under the same ownership, as was permitted in the Tudor City program. When attached to a receiving lot, the rights (which may be known as credits) can accord any of a wide array of benefits customizable to community interests: density and floor area ratio bonuses, increased setbacks, additional residential units, exemption from building permit quotas, or – most simply – the basic right to develop at all in a location where it has been otherwise restricted. TDR programs usually integrate with zoning provisions, with variation in use and bulk classifications often serving as a way to delineate sending and receiving areas and as a generator of supply and demand (Chiodelli and Moroni 2016). For example, a community may designate all agriculturally zoned lands as sending areas, and all high-density residential zones as receiving areas.

The underlying rationale common to all TDR programs is preservation of a scarce resource in the face of existing or anticipated growth (Pfeffer and Lapping 1994), and it is one among many tools available to governments in pursuit of that goal. Other approaches include purchase of development rights (PDR), where governments directly acquire land or development rights, or condemnation in exchange for compensation to the landowner under local government's expropriation authority. A government could also use its regulatory power over land use to incentivize preservation (e.g. with a property tax abatement) or mandate it (e.g. by downzoning to decrease the allowable baseline use and bulk in an area).

What distinguishes TDR from traditional approaches is its market-based AuQ17 mechanism (Buitelaar and Needham 2007; Chapin 2012). If functioning properly, it should shift the costs of preservation to private actors, rather than require compensation because of expropriation (the direct purchase of property targeted for preservation) or a successful regulatory taking claim (the 'inverse condemnation' that occurs when property is devalued due to a regulation, such as TDR) (Juergensmeyer et al. 1998: 444, 445). Because of the reliance on formal, recorded deed restrictions rather than zoning designations or direct purchase, TDR preservation may be less susceptible to crumbling in the face of development pressure compared to more malleable planning policies. TDR uses compensation to balance inequities that can result from the differential limitations imposed by land use regulations. The well-known pattern of 'windfalls' and 'wipeouts' – a pattern in which some properties' values are substantially augmented at the expense of diminution in the value of others – is a redistributive injustice unlikely to be addressed fully by legal requirements of compensation owed to landowners due to expropriation, particularly when a regulation leaves enough of the original economic use of a property intact that a successful expropriation claim cannot be made.

TDR's shift away from traditional command-and-control regulation and towards a more market-driven approach can also assuage concerns about property rights infringement that often arise with regulatory diminution of property values. Many commentators have noted the long-standing emphasis on property rights in the U.S., an ideology that traces to the country's colonial heritage and the rights philosophy of John Stuart Mill (e.g. Jacobs 2008; Norton and Bieri 2014). This has resulted in a legal system in which the social or communal dimension of property ownership is severely diminished, and in which the public good and private rights are often antagonistically positioned. Against this backdrop, TDR functions as a tool that, in theory, should be able to advance the public interest in preservation while still acknowledging the value inherent in private development rights. Not surprisingly, TDR programs have fared well in states, such as Florida, that grapple with both strong growth pressures and powerful property rights constituencies.

TDR, then, is a tool that has remarkable potential for managing scarce resources through an efficient allocative mechanism driven by private exchange. It is a tool that, in theory, can balance strong property rights advocacy with countervailing interests in preservation and growth management. However, the move from theory to practice can be a difficult one and we discuss this in the next section.

Governing and implementing TDR

Land use control in the U.S. – from planning to zoning to the subdivision of land, along with myriad other regulatory tools – is extremely fragmented among tens of thousands of local governments, including cities, towns, counties, and a variety of other jurisdictional types. This institutional landscape exists because states – which have constitutional authority over a broad array of public health, safety, and welfare regulation through their reserved police powers – have delegated much of their land use planning and zoning power to local jurisdictions, either through broad grants of authority or piecemeal-enabling statutes. As with any land use regulation, the adoption and implementation of TDR programs is shaped directly by the system of initiative, immunity, and capacity that each state establishes for its local units.

The majority of TDR programs in the U.S. are administered by a single local government, often a county, or by a grouping of local units through an interlocal agreement. For example, the Boulder County, Colorado, program involves intergovernmental agreements between the county as a sending area and nine communities that serve as receiving areas (Pruetz and Standridge 2008: 82). State and local context drives distinct approaches to TDR in different places. For example, Pennsylvania TDR programs are typically organized as partnerships between urban townships (as receiving areas) and agricultural counties (as sending areas). In Florida, where counties absorb a large share of population growth and deliver many of the local services typically associated with municipalities, TDR is widely used at the county level as a way to rationalize growth. Just as regional governance structures – those that exist at a scale matching the economic unity of a metropolitan area or the ecological unity of a watershed, for example – are rare for even basic land use regulatory tools, so too are they atypical for TDR programs. The Pinelands program, described in the introduction, was able to function at a very large scale because it was backed by state enabling legislation and federal policy that specifically contemplated the possibility of TDR as a regional land use tool.

In the U.S., land use regulatory fragmentation and reliance on local governments creates an institutional geography that is often at odds with the geographies of real estate markets and resources in need of preservation. This can create myriad problems for local TDR administration. For programs targeting natural resource protection, local boundaries may not fully contain the resource targeted for preservation, potentially resulting in heightened development pressure on nearby unprotected areas. A local government may also not have an appropriately heterogeneous mix of potential sending and receiving parcels, and the redistribution of density may be suboptimal compared to what could occur across a larger region. For example, a community may have to over-designate receiving lots by including parcels without supportive infrastructure to ensure demand balances an oversupply of sending lots (or vice versa).

Governments whose boundaries do not coincide with the broader economic geography may also face a power imbalance with developers who function within a regional market. The latter will often have the capital liquidity necessary to be mobile within the entire region – they can build in any jurisdiction. The former, meanwhile, are pushed often into a competitive interlocal game in which the equilibrium strategy is to pursue growth relentlessly and, as a result, defer to developer demands that undermine TDR effectiveness (Peterson 1981; Logan and Molotch 1987). The public officials operating in many local jurisdictions are, at least in the U.S., faced with increasing demands on service provision and production, devolution of policy responsibility from higher levels of government, and reliance on property tax revenues that are often stagnant or shrinking. A TDR program might be attractive because it does not require direct payment for preservation from the public fisc, but many local governments are unfortunately not even in a position in which preservation is on the policy agenda.

A TDR program may have the appropriate geographic scale and the necessary grant of autonomy from a higher level of government, but the governing unit may lack the requisite technical and fiscal capacity needed to support the administrative expertise TDR requires. At first blush, TDR program administration seems fairly straightforward. In most programs, parcels or lots are typically located in separate areas that track underlying zoning classifications, leading many authors to regard TDR programs as a direct extension of zoning regulations (e.g. Renard 2007; Pruetz and Pruetz 2007). Indeed, when designating separate areas for a range of densities and intensities, a community is engaging in the same type of use-based and areal planning and zoning practices with which it is already familiar (Stinson 1996).

But even in this most traditional and most common type of TDR program – that is a 'zoning integrative' program with categorical or geographical distinctions among separate sending and receiving areas (Chiodelli and Moroni 2016: 423, 424) – officials must address an array of implementation questions while dealing with market dynamics and the local political economy. First, what should be the baseline densities in the sending and receiving areas, and what should be each development right or credit award in the receiving area? Developers may be able to achieve their desired density through rezonings, special exceptions, or other provisions, undermining demand for additional density that must be purchased. In many communities, underlying zoning allows as much density as the market can absorb, rendering additional development rights through TDR valueless. Second, should be the incentive offered in the receiving area: by right or by discretionary permit? The presence of a permitting process can promote legitimacy and perhaps even democratic anchorage of TDR, but it can also create too much uncertainty about the value of the development rights – a problem that ultimately led to the judgment against the TDR program at issue in *French*, as we detail later. Third, to what extent should other forms of zoning relief for receiving lots be limited to ensure other regulations are not competing with TDR? Should the program be mandatory or voluntary from the perspective of sending and receiving area landowners? Is a public bank necessary, and if so how much should it pay for development rights? A governing body might even considering breaking from tradition and establishing a TDR program that functions through a cap-and-trade exchange, as is common in other regulatory permit markets. Several authors have outlined this possibility (see Chiodelli and Moroni 2016; Walls and McConnell 2007; Thorsnes and Simon 1999). However, we are unaware of any extant example of this approach in the U.S.

When we consider the breadth of knowledge necessary for establishing a TDR program, it becomes clear that planners may not have – indeed, may probably lack – sufficient information or capacity, particularly when considering their impact on the land market. Although TDR programs build on the cap-and-trade framework used in the air and water pollution context, land markets differ because they lack interchangeable commodities and a large, robust marketplace. In land markets we find imperfect information about highly individuated goods (i.e. each parcel is inherently unique), strong sensitivity to timing, a limited number of buyers and sellers, and the possibility of temporary 'bubbles' (Fulton et al. 2004; Linkous 2016; Nelson et al. 2012).

This section demonstrates that no one 'right' answer exists to the question of optimal TDR governance and implementation strategies. Consider, for example, the opening narratives in this chapter. The New York City program was administered over a densely populated, multi-block urban area by one very large local government. It was a single-zone program, with strict sending lot regulations that prevented all development and a system of receiving area density bonuses that were in part by right and in part discretionary. By contrast, the Pinelands program covered a vast, mostly rural expanse of land directly involving dozens of local jurisdictions plus state and federal government oversight. It used a dual-zone approach, with categorical distinction among multiple types of sending areas that varied in their allowable density and intensity of use and a complex system of benefits accessible through purchase of development rights. The programs also varied in the additional layers of administration necessary for planning and implementation. The Special Park District in New York City, and other special districts like it established since then, have largely been an extension of the existing regulatory framework, while the Pinelands effort involved a separate statewide commission, an extra comprehensive management plan, extensive revision and monitoring of constituent local plans, and both a statewide development rights bank and another one for an individual county.

Evaluating TDR effectiveness

Assessment of the effectiveness of TDR remains rare and the evidence is mixed. Studies of TDR exhibit some consistent research design features. Most studies focus on highly successful TDR programs (e.g. Pruetz and Standridge 2008; Walls and McConnell 2007; Machemer and Kaplowitz 2002). Such research excludes the majority of programs, which have protected only a limited number of acres and have generated few transfers. Eight of the top TDR programs in the U.S., measured by number of acres preserved, have protected fewer than 5,000 acres each (Pruetz and Standridge 2008). Programs that have failed to generate any transfer activity are overlooked despite the valuable information they might provide.

Also, research tends to privilege *number of acres preserved* or *number of transactions* as the key outcomes. At a minimum, this approach fails to normalize by program goals (an internal measure of effectiveness) or by an objective appraisal of the number of preserved acres or transactions appropriate or feasible in a given context (an external effectiveness measure). The perspective also ignores the regulatory landscape. TDR programs exist, in every instance, alongside other land use tools, and may appear deficient as a preservation policy because other tools help carry this burden. For example, the TDR program in Monroe County, Florida, is one of a suite of stringent regulatory tools designed to protect the county's coastal resources, which include the Florida Keys and parts of the Everglades. These regulations strictly limit developable land in the county. TDR serves an important role in mitigating property rights impacts associated with these regulations, but the scale of TDR-facilitated preservation is small as a result. At a more fundamental level, the privileging of raw acreage or counts of transactions treats every acre or exchange of development rights as equally effective. Linkous and Chapin (2014) find evidence that TDR programs that protect large numbers of acres can still lead to fragmented development and sprawl in rural areas while failing to support compact community goals.

TDR research often uses descriptive single- or multiple-case studies. As a result, 'best practices' are typically lists of features that are functionally essential to any development rights market (and that the leading programs, not surprisingly, share) or are accounts of what has worked in a specific setting over a limited time frame. For example, Johnston and Madison (1997), in a review of four large and well-known programs, discuss at length the importance of consensus-building and education in eliciting community support for programs built from the ground up (i.e. those not mandated by state or federal legislation). Pruetz and Standridge (2008), in a meta-review of TDR articles about the largest U.S. programs, found that many shared common features, but these included readily apparent necessities such as a demand for bonus development in the receiving area, the need for receiving areas customized to local circumstances, and the importance of strict sending area regulations. Machemer and Kaplowitz (2002) examined three programs through an iterative case study approach, and found that successful programs featured, among many other characteristics, a strong political foundation and simple, cost-efficient administration.

The extant TDR research has produced evidence that has value and is foundational to an understanding of program function. However, many underexplored opportunities to better understand the efficacy of the tool remain. First, TDR could be studied through quantitative analysis. Given the many ways in which TDR programs can be structured and the fairly large population of programs, transactions, and parcels from which to draw data, TDR is well-suited to large sample quantitative evaluation. Unfortunately, such work – which could complement the findings from qualitative work – is rare.

Second, TDR has not been examined as a tool whose efficacy and impacts might vary with changes in the political economy in which the tool is implemented. Although the literature on growth management explores the roles of community socio-demographic attributes and development interests in influencing outcomes, this work does not specifically theorize or empirically test how TDR as a specific policy tool interacts with local, regional, and global capital flows or by the institutional setting. Such work could incorporate both spatial heterogeneity (differences across jurisdictions) and temporal heterogeneity (changes in contexts over time).

Finally, we observe that TDR researchers have yet to tackle the most pressing question for planners and policymakers: how does the tool perform compared to viable policy alternatives, including both traditional zoning mechanisms (such as variances or downzoning) as well as tools specifically targeted at preservation (such as purchase of development rights)? For readers of this book, the question is undoubtedly of considerable interest. To answer such a question, researchers would need not only a comprehensive TDR program database but also a comprehensive land use policy database. This would allow direct comparison of outcomes in places that are similar across multiple, theoretically meaningful dimensions with variation only in their suite of land use tools. While such work would be challenging, it would help practitioners gain insight into which tools will be most effective in managing and preserving scarce resources.

The legitimacy of TDR

Lastly, we consider the legitimacy of TDR programs. At the outset, we note that the functional legitimacy of TDR depends on a legal system with a few basic features. First, development rights should be distinct and severable from property ownership. A long-standing concept in U.S. property law, and one intrinsic to the function of TDR programs, is that of property as a bundle of rights that includes the rights to possess, exclude, transfer, and develop. This notion is present in legal systems that follow an Anglo-Saxon property tradition, while those following a Roman tradition favor a holistic conceptualization of property ownership (Renard 2007). Second, if a TDR program is governed by a unit that lacks its own land use regulatory authority, then the ability to engage in TDR must be enabled by the requisite higher level of government. Third, at a minimum, TDR must serve the public interest. In terms drawn from U.S. constitutional substantive due process jurisprudence, it must be rationally related to a legitimate state interest, which includes protection of the public health, safety, morals, or general welfare. Similar provisions are present in many legal systems. So long as TDR programs articulate preservation of scarce resources as a goal, they are likely to meet such requirements. A clear link to an existing public interest may also help secure the support needed to sustain TDR exchange. Montgomery County, Maryland, for example, has a deep history of pioneering land use policy and a large share of productive family farms, creating a strong interest in agriculture preservation through TDR. Similarly, TDR has fared well in communities with long-standing commitments to natural resource preservation (such as Boulder, Colorado, and the Lake Tahoe region) or places where farming has high cultural and economic value (such Calvert County, Maryland, and Manheim Township, Pennsylvania; Fulton et al. 2004; Machemer and Kaplowitz 2002; Lane 1998).

After moving past these basic functional requirements, TDR legitimacy can be viewed through three lenses. First, do such programs garner public support? The officials who adopt and administer TDR programs are either elected or function within a bureaucracy that is not always well insulated from public pressures. We have already noted TDR's ability to appeal to property rights advocates who might otherwise oppose land use policy interventions, and this may be critical to overcoming a political economy that is strongly resistant to growth restrictions. Of course, some communities are resistant to growth and increased density and favor preserving community character. In these locales, TDR programs – which require higher density in the receiving area – may struggle for public legitimacy.

Second, TDR legitimacy may be undermined if the programs are perceived as captured by developers. Machemer and Kaplowitz (2002) identified a new generation of TDR programs in the 1990s and 2000s that respond to demand by developers for added density in rural and fringe locations. These programs, in contrast to the paradigmatic TDR examples, designate *receiving* areas in easier-to-develop greenfields where landownership is less fragmented and not-in-my-backyard (NIMBY) sentiment less likely. Linkous (2016) describes contemporary programs that provide vast new development entitlements on large, rural landholdings, suggesting an appropriation of the tool by development interests. In a non-U.S. setting, Shih and Chang (2015) show that TDR program outcomes in Taiwan are influenced by the monopoly power of well-connected investors.

Lastly, and related directly to the etymological roots of the word legitimacy, we must consider the constitutionality of TDR programs. The economic value of development rights has, in repeated cases, been the linchpin on which turned the legal validity of TDR programs. The stories from the opening of this chapter are illustrative. In the opinion in *French*, the Tudor City parks case, Judge Breitel recognized development rights as 'an essential component of the value of the underlying property' and noted that the challenged zoning amendment had rendered the rights once attached to the parks as

> utterly unusable until they could be attached to some accommodating real property, available by happenstance of prior ownership, or by grant, purchase, or devise, and subject to the contingent approvals of administrative agencies . . . events that may never happen because of the exigencies of the market and the contingencies and exigencies of administrative action.
>
> (1976: 597, 598)

In ruling the zoning amendment a violation of constitutional requirements, Breitel commented that 'the loose-ended transferable development rights in this case fall short of achieving a fair allocation of economic burden' (*French* 1976: 598). The court emphasized that the flaw was not in the notion of development rights transfer per se, but in the execution of the program. Any economic benefits from using the transferred rights were rendered, at best, uncertain and contingent because of the additional approval processes needed for their use at a receiving lot. The designation of the parks as undevelopable granting lots had – from the perspective of the developer-landowner – removed all reasonable economic value, forcing the developer to shoulder the entire burden of retaining the public value that remained from their use solely as parks.

By contrast, in *Gardner* (1991: 215) Judge Handler noted that the plaintiff

> retains several viable, economically beneficial uses of his land under the revised CMP. That those uses do not equal the former maximum value of the land in a less- or un-regulated state is not dispositive, for there exists no constitutional right to the most profitable use of property.

The two cases, each from a different state and a different era, hinged on the question of *how much deprivation of value is too much*? One could generalize that a complete ban on further development in a sending area coupled with a non-functional market with no buyers (including no ability for the government to serve as a buyer) would be definitively a regulatory taking requiring compensation. But beyond this extreme is a vast gray area within which most TDR programs operate.

Two U.S. Supreme Court cases – *Penn Central* (1978) and *Suitum* (1997) – provide a little more guidance but still leave TDR's status somewhat unsettled. The cases were not decided directly on the issue of TDR constitutionality, but each contained dicta that has been and will undoubtedly continue to be influential in shaping the judicial consideration of TDR programs.[1] In *Penn Central*, the Supreme Court remarked that

> [w]hile (development) rights may well not have constituted 'just compensation' if a 'taking' had occurred, the rights nevertheless undoubtedly mitigate whatever financial burdens the law has imposed on appellants and, for that reason, are to be taken into account in considering the impact of regulation.
>
> (*Penn Central* 1978: 33)

Similarly, a concurrence in *Suitum* by Justice Scalia reads in part that compensation provided via a TDR program can

> mitigat(e) the economic loss suffered by an individual whose property use is restricted, and property value diminished, but not so substantially as to produce a compensable taking. They may also form a proper part, or indeed the entirety, of the full compensation accorded a landowner when his property is taken.
>
> (*Suitum* 1997: 749, 750)

What all four cases emphasize is that the economic impact is at the heart of legitimacy, and must be evaluated to answer the constitutional question of whether regulatory expropriation has occurred. The value of the development rights, therefore, may be part of a legally required, just compensation scheme, or they may simply exist to more fairly distribute the benefits and burdens of scarce resource preservation. For those who view property ownership as containing inherent development rights and who hew closely to a strong property rights ethos, TDR – unlike traditional land use tools – acknowledges that what is being given up has value and that a private market (or at least a quasi-private market) is a reliable mechanism for advancing the public good. For those who view development value as bestowed by the government through its investment and regulations and, therefore, as part of the community's economic property, TDR can be framed as a way to mitigate distributive injustice. As noted earlier, regulations can produce windfalls and wipeouts – they can enhance the value of some properties at the expense of others. Constitutional guarantees may provide some limitation, but availing them requires the expense and delay of the judicial process. TDR programs create a transparent compensation mechanism. Thus, whether property rights are interpreted as individualistic or communitarian, development rights transfer can be a legitimacy-enhancing land use tool.

Conclusion

Undeveloped or underdeveloped land often has a dual identity as a scarce resource. To some, its greatest value lies in its present character as open space, farmland, a landmark, and the like, and it is this character as a diminishing resource that warrants preservation. To others, its greatest value lies in what it could become through development, and land that is suitable for development – that is not publicly held, that is not unbuildable due to natural features, and that exists in a market in which demand may arise – is itself a quite limited resource. TDR helps to reconcile the tension between these competing visions by allowing landowners to partake in the benefits of development while sharing the costs of preserving scarce resource lands. An optimal TDR program creates an efficient system of exchange in which the value of development rights transferred from preserved land (plus any retained rights) meets or exceeds the value of the land if developed, and in which the economic value of development elsewhere in the TDR jurisdiction offsets any tax base diminution from preservation. Unfortunately, the potential of TDR to achieve this balance often remains unfulfilled, and research needs to take a strong evaluative turn to better discern how TDR can achieve its promised outcomes. The question at the heart of this book – *can a given tool serve as an effective, practicable, and legitimate pathway to the preservation of a scarce resource?* – remains open with regard to TDR. What we do know is that TDR is a remarkably flexible tool, and that it has been able to preserve a diverse mix of scarce land and other community resources in the U.S. and internationally.

Note

1 Several authors have treated these cases at length, and we refer the reader to their work (e.g. Juergensmeyer et al. 1998: 461–467; Radford 1999; Lazarus 1997).

References

Buitelaar, E. and Needham, B. (2007) Property rights and private initiatives: An introduction, *Town Planning Review*, 78(1), 1–8.

Chiodelli, F. and Moroni, S. (2016) Zoning-integrative and zoning-alternative transferable development rights: Compensation, equity, efficiency, *Land Use Policy*, 52, 422–429.

Costonis, J.J. (1973) Development rights transfer: An exploratory essay, *The Yale Law Journal*, 83(1), 75–128.

French Inv. Co. v. City of NY, 1976. 39 N.Y.2d 587.

Fulton, W., Mazurek, J., Pruetz, R. and Williamson, C. (2004) *TDRs and other market-based land mechanisms: how they work and their role in shaping metropolitan growth*, The Brookings Institution, Washington, DC.

Gardner v. New Jersey Pinelands Com'n, 1991. 593 A.2d 251.

Giordano, M. (1987) Over-stuffing the envelope: The problems with creative transfer of development rights, *Fordham Urban Law Journak*, 16, 43.

Henger, R. and Bizer, K. (2010) Tradable planning permits for land use control in Germany, *Land Use Policy*, 27(3), 843–852.

Jacobs, H.M. (2008) The future of the regulatory takings issue in the United States and Europe: Divergence or convergence? *The Urban Lawyer*, 51–72.

Janssen-Jansen, L.B. (2008) Space for Space, a transferable development rights initiative for changing the Dutch landscape, *Landscape and Urban Planning*, 87(3), 192–200.

Johnston, R.A. and Madison, M.E. (1997) From land marks to landscapes: A review of current practices in the transfer of development rights, *Journal of the American Planning Association*, 63(3), 365–378.

Juergensmeyer, J.C., Nicholas, J.C. and Leebrick, B.D. (1998) Transferable development rights and alternatives after suitum, *The Urban Lawyer*, 441–475.

Lane, R. (1998) Transfer of development rights for balanced development, *Land Lines*, 10(2), 6–7.

Lazarus, R.J. (1997) Litigating Suitum v. Tahoe Regional Planning Agency in the United States Supreme Court, *Journal of Land Use & Environmental Law*, 12, 179.

Linkous, E.R. (2016) Transfer of development rights in theory and practice: The restructuring of TDR to incentivize development, *Land Use Policy*, 51, 162–171.

Linkous, E.R. and Chapin, T.S. (2014) TDR program performance in Florida, *Journal of the American Planning Association*, 80(3), 253–267.

Logan, J. and Molotch, H.L. (1987) *Urban fortunes: The political economy of place*, University of California, Berkeley.

Machemer, P.L. and Kaplowitz, M.D. (2002) A framework for evaluating transferable development rights programmes, *Journal of Environmental Planning and Management*, 45(6), 773–795.

Marcus, N. (1974) Mandatory development rights transfer and the taking clause: The case of Manhattan's Tudor City Parks, *Buffalo Law Review*, 24, 77.

Micelli, E. (2002) Development rights markets to manage urban plans in Italy, *Urban Studies*, 39(1), 141–154.

Nelson, A.C., Pruetz, R., Woodruff, D., Nicholas, J.C., Juergensmeyer, J.C. and Witten, J. (2012) The TDR handbook, in: *Designing and implementing transfer of development rights programs*, Island Press, Washington, DC.

Norton, R. and Bieri, D. (2014) Planning, law, and property rights: A US-European cross-national contemplation, *International Planning Studies*, 19, 3–4.

Penn Central Transp. Co. v. New York City, 1978. 438 U.S. 104.

Peterson, P.E. (1981) *City limits*, University of Chicago Press, Chicago.

Pfeffer, M. and Lapping, M. (1994) Farmland preservation, development rights, and the theory of the growth machine: The review of planners, *Journal of Rural Studies*, 10(3), 233–248.

Pruetz, R. and Pruetz, E. (2007) Transfer of development rights turns 40, *Planning & Environmental Law*, 59(6), 3–11.

Pruetz, R. and Standridge, N. (2008) What makes transfer of development rights work? Success factors from research and practice, *Journal of the American Planning Association*, 75(1), 78–87.

Radford, R.S. (1999) Takings and transferable development rights in the Supreme Court: The constitutional status of TDRs in the aftermath of suitum, *Stetson Law Review*, 28, 685.

Renard, V. (2007) Property rights and the 'transfer of development rights': Questions of efficiency and equity, *Town Planning Review*, 78(1), 41–60.

Shih, H. and Chang, H.B. (2015) Transfer of development rights and public-facility planning in Taiwan: An examination of local adaptation and spatial impact, *Urban Studies*, 53(2), 1244–1260.

Stinson, J.D. (1996) Transferring development rights: Purpose, problems, and prospects in New York, *Pace Law Review*, 17, 319.

Suitum v. Tahoe Regional Planning Agency (1997) 520 U.S. 725.

Thorsnes, P. and Simons, G.P. (1999) Letting the market preserve land: The case for a market-driven transfer of development rights program, *Contemporary Economic Policy*, 17(2), 256–266.

Walls, M.A. and McConnell, V.D. (2007) Transfer of development rights in US communities: Evaluating program design, implementation, and outcomes, *Resources for the Future*. AuQ18

Wang, H., Tao, R. and Tong, J. (2009) Trading land development rights under a planned land use system: The Zhejiang model, *China & World Economy*, 17(1), 66–82.