Tools for a Resilient Virginia Coast:

Designing a Successful TDR Program for Virginia's Middle Peninsula

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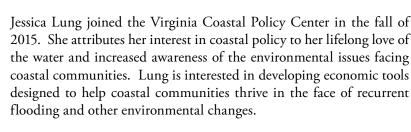




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About the Virginia Coastal Policy Center

The Virginia Coastal Policy Center (VCPC) at the College of William & Mary Law School provides science-based legal and policy analysis of ecological issues affecting the state's coastal resources, providing education and advice to a host of Virginia's decision-makers, from government officials and legal scholars to non-profit and business leaders.

With two nationally prominent science partners – the Virginia Institute of Marine Science, one of the largest marine research and education centers in the United States, and Virginia Sea Grant, a nationally recognized broker of scientific information – VCPC works with scientists, local and state political figures, community leaders, the military, and others to integrate the latest science with legal and policy analysis to solve coastal resource management issues. VCPC activities are inherently interdisciplinary, drawing on scientific, economic, public policy, sociological, and other expertise from within the College and across the country. With access to internationally recognized scientists at VIMS, to Sea Grant's national network of legal and science scholars, and to elected and appointed officials across the nation, VCPC engages in a host of information exchanges and collaborative partnerships.

VCPC grounds its pedagogical goals in the law school's philosophy of the citizen lawyer. VCPC students' highly diverse interactions beyond the borders of the legal community provide the framework for their efforts in solving the complex coastal resource management issues that currently face Virginia and the nation. Whether it is working to understand the underlying realities of local zoning policies or attempting to identify and reconcile the concerns of multiple stakeholders, VCPC students experience the breadth of environmental lawyering while gaining skills that will serve them well regardless of the legal career they pursue upon graduation.

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Introduction

Situated at the Eastern tip of the Commonwealth's Middle Peninsula, Mathews County, Virginia, is a historic and charming rural community nestled against the Chesapeake Bay. But the same waters that sustain life in Mathews County threaten its continued existence. As sea levels rise and recurrent coastal flooding razes Virginia's Middle Peninsula, too many citizens of Mathews can only watch as their homes and land slip slowly into the Bay. In order to preserve the beauty and safety of the community for current residents and future generations, Mathews County must look to developing strategies and tools to combat this threat. This paper adapts the transfer of development rights (TDR) concept – a community-planning tool most frequently used for farmland preservation – to alleviate the financial burdens that recurrent flooding and sea level rise impose on Mathews County and its citizens.

A TDR program diverts development from a designated area of a community where the locality seeks preservation or reduced growth towards another designated area of the community where it seeks more growth.¹ The fundamental TDR process is as follows:

- **1.** The community identifies an area in which it does not want further development, referred to as a "sending" area.
- **2.** The community identifies an area for added development, referred to as a "receiving" area. The community seeks further growth in this location.
- **3.** Sending area property owners or TDR partners elect, if compensated, to sever their rights to develop their property, placing a permanent easement on the land.
- **4.** Meanwhile, developers can pay extra for additional development rights in receiving areas.
- **5.** This extra fee, paid by developers, is passed to the sending area property owners as compensation for voluntarily relinquishing their development rights.

In summary, developers pay for an added development bonus with the payment serving as compensation to the sending area property owner for foregoing development and agreeing to preserve his property (most frequently in perpetuity).

Few, if any, existing programs are designed to encourage sustainable development away from areas vulnerable to sea level rise and recurrent coastal flooding. Burdened by economic and political challenges, TDR programs are, as discussed below, inconsistent in accomplishing the land use objectives of the implementing community. This paper explores the history of TDRs in Virginia, summarizes existing research on TDR effectiveness, describes the challenges in Mathews, and proposes TDR models as land-use tools for sustainable development in Virginia's Middle Peninsula.

A History of Transfer of Development Rights in Virginia

The Virginia General Assembly adopted enabling legislation for TDRs in 2006.² After its adoption, the General Assembly amended the TDR law to allow for transfers across county-city lines and to remove a requirement that the transferred or severed rights from the sending area be immediately attached to another property after severance.³ In 2010, a group of stakeholder representatives consisting of lawyers, planners, developers, and

others, created a model ordinance.⁴ Although many localities within the Commonwealth explored creating TDR programs, currently, only Frederick, Stafford, and Arlington counties utilize a TDR program.

Purchase of development rights programs (PDR) are more common in Virginia, with 21 participating local governments across the state.⁵ Within a designated area, PDRs provide governmental compensation to landowners while restricting development on their land.⁶ In return for compensation, participating landowners place an easement on their land.⁷

Virginia Beach's PDR program is one of the most successful in the Commonwealth, preserving over 9,265 acres as of 2015.8 Adopted in 19959, the City of Virginia Beach's PDR program arose out of necessity. In the 1980s and 1990s Virginia Beach experienced unprecedented growth, resulting in land scarcity. Residential development steadily encroached upon the city's greenline, the geographic boundary between the urban/suburban and rural regions of the city. This was problematic because the city's rural areas accounted for roughly one third of the local economy. Virginia Beach determined that extending infrastructure into the rural areas would be very expensive and cause significant harm to the city's economy and culture. Additionally, rural landowners faced substantial costs and expenses that threatened forced sales of their property. Inheritance taxes on an inherited farm, for example, could sometimes be so large that selling the land was the only option. Virginia Beach's PDR program enabled landowners to retain ownership of their land by providing cash through the purchase of the development rights attached to their property.

Virginia Beach's population generally supported establishing a PDR program. A TDR program was also proposed during this same time period, but it did not garner the same level of public support. Thus, the city moved forward with a plan to develop a TDR program and abandoned the TDR alternative.

Property Rights and TDRs and PDRs Pruetz and Standridge argue that at the time Virginia Beach adopted its PDR program the city was a fundamentally conservative community. They share their conclusion that many citizens viewed a TDR program as government interference with private property rights and the private market. Even though TDRs are often transacted through the private marketplace, the local government serves as a third party to the transaction by enabling the program, determining the sending and receiving areas, and establishing the zoning law framework. Interestingly, a PDR program arguably involves more government entanglement with private property rights than TDRs: With TDRs, the government is merely a party enabling the private market transaction while with PDRs the government is the marketplace. Moreover, funding for PDRs, as in Virginia Beach, is often obtained through real estate tax levies on all landowners whereas funding for TDRs is obtained through a transaction involving a willing buyer and seller. It is interesting that Virginia Beach opted for a taxing tool to provide economic recovery for landowners and resisted use of the supply and demand of the market alternative.

Frederick County adopted a TDR ordinance in 2010 to preserve the county's farmland and rural areas. ¹³ Located in the northwest part of the Commonwealth, Frederick County encompasses the city of Winchester and is mostly rural. ¹⁴ Frederick County designed its TDR program to simultaneously accomplish two goals in addition to famland preservation: increase development opportunities in Urban Development Areas (UDAs) and benefit the

county overall. During the inception of the TDR program, the county found that 30% of all new housing development occurred in the rural areas of the county. Having a significant portion of residential development in rural areas creates challenges for localities because rural areas lack the same level of infrastructure present in urban and suburban communities. More residential construction in rural areas places a heavier burden on local governments to provide additional schools, transportation, and public water and sewer, among other services.

Frederick County's TDR program proposes to preserve farmland and alleviate financial burdens on landowners. Frederick County's TDR program grants residential density rights to qualified landowners, which can then be severed from the land and sold to developers on the open market. The goal is for the landowners to remain solvent and retain ownership of their land. Frederick County subdivides its sending area into three categories determined by land attributes.¹⁵ The county then assigns different density bonuses to each of these categories.¹⁵

Because a TDR program's success depends on demand for bonus development in the receiving areas, ¹⁶ Frederick County's TDR program designed its program to be attractive to developers. As with most TDR programs, when developers purchase rights they gain increased development density in a residential development project within a receiving area. An increase in residential densities means an increase in units available for sale and consequently an increase in the property's market value. In addition, gaining additional density rights through participation in a TDR program is often designed to work faster than a traditional rezoning for increased density.

TDR Economic Benefits

Frederick County derives significant benefits from a TDR program. The TDR plan is designed to increase growth in specified urban areas of the county, the Urban Development Areas (UDAs). When residential development increases, so does the county's tax base. However, developers of homes in the rural areas of the county do not pay proffers or provide transportation improvements. The county must fund these expenses, making residential development in rural areas more costly to the county. UDAs can accommodate a higher density and more residential growth than rural areas. When residential density increases within the UDA, and development shifts from rural areas to urban areas, the additional cost of services decreases, which alleviates financial stress on local government. TDR Program in Frederick County, note 13.¹⁷

Frederick County has completed only one severance and transfer of a development right: a private transfer where the owner of the land in the sending area was the same individual who owned the land in the receiving area. Essentially, the individual transferred development rights from himself to himself. Additionally, though the county approved several farms to transfer their rights, no developers to date have sought to purchase these rights. According to the county's senior planner, the lack of demand for bonus density is primarily due to a stagnant economy and stymied residential development in general in the county.¹⁸

The current results of Frederick County's TDR program provide an example of how the market can dramatically influence the success of a program, regardless of whether a locality has done all it can to enable the TDR process. It is the hope of Frederick County that eventually the market will rebound.

TDR Success Factors

Rick Pruetz and Noah Standridge's article, "What makes TDRs work? Success Factors From Research and Practice" is a useful framing document for localities desiring to implement or improve upon a TDR program. The authors analyzed the 20 most successful TDR programs nationwide, in terms of land area preserved, and identified 10 TDR success factors in those individual programs. The authors ranked the factors by frequency of occurrence:

- **1.** Demand for bonus development
- 2. Customized receiving areas
- **3.** Strict sending-area regulations
- **4.** Few alternatives to TDR
- **5.** Market incentives
- **6.** Certainty of TDR use
- 7. Strong public preservation support
- **8.** Simplicity
- **9.** Promotion and facilitation
- 10. TDR bank

Pruetz and Standridge assert that program success depends on the existence of at least one of the following factors:

- Strict sending-area regulations
- Market incentives
- Few alternatives to TDR

They note that demand for bonus development and customized receiving areas is also a critical factor for success.

According to Pruetz and Standridge, the three most successful programs, as of 2008, are King County, WA; New Jersey Pinelands, NJ; and Montgomery County, MD. All three TDR programs exhibit three of these four factors (demand for bonus development, customized receiving areas, and strict sending regulations.) New Jersey Pinelands and Montgomery County also display a fourth factor, few alternatives to TDR.

Demand for bonus development is the highest-ranking factor for successful TDR programs. As reflected in the Frederick County summary, for a TDR program to work, developers must actually want the rights the landowners are willing to transfer. Locality stimulation of demand for TDRs is not a simple action. Although downzoning can assist in increasing demand for bonus density, downzoning is sometimes politically unpopular. Because of the potential local distaste for downzoning and the threat of lawsuits, localities may be hesitant to embrace this option. An alternative, potentially less-polarizing option, is to connect the transfer with a benefit or a perk other than increased density. For example, localities could allow bonus floor area, or exemptions from road improvement requirements, or expedited building permit processes.²⁰ This paper discusses this concept in later sections.

Tailored receiving areas are a second critical factor for success. Successful TDR programs customize their receiving areas to their individual communities. Context is key and necessitates a "boots on the ground" approach. Community stakeholders must buy into the TDR program, so the areas of the community receiving additional density should target the locality's development goals. Citizens might resist such a proposal due to a "Not in My Backyard" attitude. Pruetz and Standridge suggest creating new receiving areas in previously undeveloped areas, thereby separating new development from existing communities, to mitigate this type of resistance.²¹

For most communities implementing a TDR program, the ideal transfer is from rural areas to cities with greater infrastructure and resources. Some counties experienced success with interjurisdictional transfers. Boulder, Colorado signed intergovernmental agreements to facilitate transfers of development rights between the county and six cities and three unincorporated communities in close proximity to Boulder.²²

Transfers not only rely on demand for density and customized receiving areas, but also on the supply of TDRs flowing into the market. Strict sending-area development regulations inherently increase the supply of TDRs.²³ Several problems arise when a locality fails to strictly regulate its sending areas. Without strict sending area regulations, the development value of the property may exceed the value of the transferable development rights. As a result, the property owner can either charge more for the right (which could deter developers) or simply develop the property (against the goals of the TDR program). In either scenario, demand for TDRs decreases.

To combat this type of resultant market failure, Montgomery County downzoned their sending areas from one unit per five acres to one unit per twenty-five acres.²⁴ By downzoning, Montgomery County increased demand for TDRs amongst the development community. Montgomery County's TDR program is now among the most successful TDR programs in the nation.²⁵ But downzoning sending areas, much like downzoning receiving areas, can incite political backlash,²⁶ depending on the political climate of the locality. Many opponents to such a downzoning may assert that it is a form of a government taking under the Takings Clause of the Fifth Amendment.²⁷

Why do TDR Programs Fail?

Localities nationwide have implemented TDR programs, with varying degrees of success. Most of these programs were directed at agricultural area preservation rather than environmentally sustainable development. Nonetheless, existing TDR schemes, including those that are underperforming or failing entirely, offer insight into how to construct a successful TDR program. While certain design principles predispose a TDR program to success or failure, any successful TDR program must be specifically designed for its local market so as to ensure an optimal supply and demand ratio.²⁸ A suboptimal ratio of supply and demand incentives within a particular locality can make-or-break a program.

Supply

If a locality fails to offer a sustainable "supply" of development rights, it stunts the transfer process. While analysts conclude that in general, there are fewer problems optimizing the "supply" side,²⁹ most of the TDR programs analyzed were programs implemented to preserve agricultural land, not already-developed properties facing coastal flooding and sea-level rise effects.

In some failed TDR programs, the zoning of the sending area undercuts the landowner's incentive to exchange the development rights. For example, in sending areas with a high baseline density, a parcel of land typically has a somewhat elevated development value. According to the available research, a landowner, aware of this value, is incentivized to retain his development rights, develop the land, and realize that value. In aggregate, a "sending" area would have little to send, and the TDR program would be anemic. In fact, baseline density does not even need to be excessively high for the market to simply sidestep an available TDR program. If zoning density in the sending area merely satisfies (rather than exceeds) market demand, there is little value added by a TDR program that offers bonus density elsewhere. Comprehensive downzoning in a sending area would stimulate a "supply" of transfers by devaluing the retention of these rights, but such a comprehensive downzoning commitment has intimidated some localities.

TDR programs are also prone to fail when there is either burden or uncertainty inherent in the transaction.³¹ Because active managerial oversight is similarly important to a program's maintenance and success, localities must take particular care that this oversight does not burden the process of transfer so as to deter participation. In some jurisdictions, for example, TDR use is not "by right," and instead requires the approval of local government at some point in the process.³² The introduction of some discretionary local-government approval process adds an element of risk to investment in the transaction, which in turn can cause participants to flinch. A streamlined, "by right" TDR process minimizes the actual or perceived risks of the transaction and encourages participation. Local government may stimulate the transaction by aggregating and disseminating information to potential participants, establishing a TDR "bank" to mediate the transaction, or even entering the market to stabilize prices; but to reduce the risk that deters investors, localities must accept a reduced amount of control over individual land uses.³³

Demand

Optimizing the "demand" side – the receiving areas and those seeking to develop within them – is trickier. For the TDR market to thrive and accomplish the locality's policy goals, demand for development in receiving areas must match or exceed the supply of "exported" development rights from sending areas. Several factors, however, diminish this demand.

TDR programs fail when there are sufficient alternatives to participation in the TDR market. If there are other avenues to receive a density bonus in a desired development area without using the TDR program, demand for the TDR is thereby reduced. In some jurisdictions, TDRs are only one of several ways a developer can secure a desired density bonus.³⁴ These available workarounds dilute the incentive to enter the TDR market to achieve the desired result.

Similarly, TDR programs fail when an alternative to the TDR market is nonparticipation. If the existing a density levels in the receiving areas satisfy the market, developers have no need to secure any additional development rights, and therefore no need to enter the TDR market. As discussed above, creative and strategic zoning decisions can stimulate or facilitate demand, but cannot create it entirely; developers must want to develop in a receiving area from the outset.

Just as burdensome government oversight can discourage property owners from severing their development rights, cumbersome restrictions and requirements for eligible developers can discourage participation in the program. Developers will likely be wary of the added transaction costs associated with a clunky, overregulated, or inefficient TDR process.

TDR Failure Factors		
Supply (Transferring Owners in Flood-prone Communities)	Demand (Receiving Area Developers)	
In sending area, Development Value ≥ Transfer Value	Alternatives to acquire desired density without TDR	
Burdensome process deters participation	Existing zoning density satisfies market	
Discretionary government approval adds uncertainty, risk	Developers disinterested in receiving area	
	Burdensome oversight deters participation	
	Discretionary government approval adds uncertainty, risk; development is not "by right"	

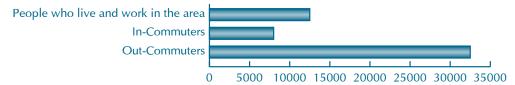
Making a TDR Work in the Middle Peninsula and Mathews County

A successful TDR program in Mathews County, part of Virginia's Middle Peninsula, must be designed for the Mathews County market. In general, a locality must incorporate their TDR design into their growth strategies and reconcile a new system of development incentives with the locality's long-term interests. Additionally, a locality must apply the factors for TDR success and failure, identified above, when crafting the balance of supply and demand incentives for effective TDRs. In the Middle Peninsula, demographic and economic pressures implicate specific challenges and opportunities in balancing supply and demand.

Residents of the Middle Peninsula overwhelmingly travel out of the area for work.³⁵ The top 3 destinations of these out-commuters are nearby Newport News, Henrico County, and Richmond.³⁶ If these residents' properties are reclaimed by sea-level rise, or razed by recurrent flooding, there may exist a strong incentive for these residents to resettle outside of the Middle Peninsula and nearer to their places of employment. Any TDR program in Mathews County, therefore, must be mindful of the incentive towards diaspora, where property owners transfer their development rights, accept the perks of the program, and flee the county. The locality's interest in averting redevelopment of threatened property may be accomplished, but at the cost of splintered communities and an eroding tax base. The inter-jurisdictional transfer of development rights may, for this reason, be a less attractive strategy if it allows for an incentive to resettle out of the area. In effect, Mathews County's goals are somewhat in tension: to achieve the desired policy goals of relocating residents away from flood prone areas, flood-displaced residents must be encouraged to leave their existing properties, but not the county itself.

COMMUTING PATTERNS

(MIDDLE PENINSULA)



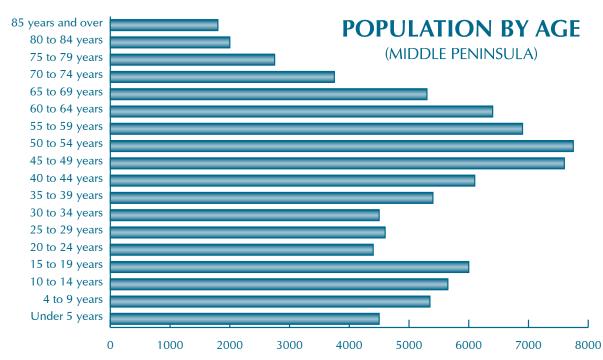
People who live and work in the area	12,083
In-Commuters	8,690
Out-Commuters	32,308
Net In-Commuters (In-Commuters minus Out-Commuters)	-23,618

Source: U.S. Census Bureau,

OnTheMap Application and LEHD Origin-Destination Employment Statistics, 2012.

TDR programs also fail when there are sufficient alternatives to participation in the TDR market. If there are other avenues to receive density bonus in a desired development area without using the TDR program, demand for the TDR is thereby reduced. In some jurisdictions, TDR's are only one of several ways a developer can secure a desired density bonus and these available workarounds dilute the incentive to enter the TDR market to achieve the desired result.

For many in Mathews County, however, shoreside living is a lifestyle choice. The Middle Peninsula population is aging,³⁷ and older retirees hold many of the threatened waterfront properties prone to recurrent flooding. There may not be strong inclination for some of these residents to forsake the waterfront homes in which they have chosen to spend their golden years.



In turn, "supply" side property owners may not find sufficient compensation to justify relocation. Because of these localized factors, the "demand" side of the market may find little value in added development density. There simply may not be much value in transferring development density.

A successful TDR program for coastal flooding impact mitigation might therefore convert the transferred "development rights" into some valuable bonus other than density. The Middle Peninsula Planning District Commission's April 2013 Economic Development Strategy documents a variety of prospective development projects in the Middle Peninsula.³⁸ In essence, a successful TDR program in Mathews County or elsewhere the Middle Peninsula might necessitate "converting" the development right into some other valuable perk for developers, demand for which would sustain the TDR market and offer a steady stream of demand to entice supply-side homeowners.

The Economic Development Strategy identifies projects of both "strategic" and "vital" importance in the Middle Peninsula. The projects for private industry may be opportunities to entice those private developers to fund TDRs in exchange for development incentives. Localities like the Middle Peninsula could be endlessly creative in what incentives they tailor to these projects and their developers. Incentives might include tax incentives, streamlined licensure or permitting processes, and even favorable zoning.

Vital Projects	Strategic Projects
Water supply/sewer infrastructure	Upscale retirement home
Broadband infrastructure	Regional tourism
Tappahannock Main Street revitalization	Middle crossing of the York River (bridge)
Regional tourism	Compressed natural gas filling station
Pellet plant and silviculture	

Localities could align a TDR program – their environmentally-conscious land use interests – with their strategic and economic interests, offering development incentives of real value to developers in particular industries in exchange for funds that would make whole the transferors in flood-vulnerable communities. On this "demand" side of the TDR transaction, widely accepted to be the trickier side to optimize, ample room exists for experimentation to make the program economically viable.

Meanwhile, on the supply side, localities can capitalize on the real, measurable threat of recurrent flooding and sea level rise to stimulate the "supply" of rights transfers. First, localities bear the cost of providing emergency services to flooded areas. If the locality were to levy an impact fee on the areas that most require these emergency services (instead of raising taxes on the County at large to bear these costs) homeowners in these areas would be inclined to consider alternatives to continually redeveloping repeatedly damaged properties. Impact fees could therefore encourage sending area property owners to enter the TDR market and transfer their development rights.

Second, as homeowners face the inevitable loss of their investments by rising water levels, a locality might be able to take advantage of the resulting urgency by structuring its TDR program like a corporate "tender offer." The locality would limit participation to a finite amount of transfers at a set level of compensation to the transferor. Once the threshold number of homeowners development rights are "tendered" by the right-holders, the TDR program suspends. Each owner, presumably recognizing he will inevitably lose

his investment, is incentivized to act immediately to offset that loss, before his similarly-situated neighbors exercise the option and the TDR program closes.

In fact, the locality could be quite flexible in structuring the "tender offer," tailoring the program to the locality's specific strategic goals. By structuring the tender offer in tiers, the locality could customize the program and prolong its use if the locality is unwilling to close the program completely. Tenderers in the first "tier" – e.g., the first 20 property owners to tender – receive more attractive or more generous compensation than tenderers in the second tier, who will receive more or different compensation than those in the third, and so forth. A graduated structure would incentivize homeowners to transfer sooner, in competition with other threatened homeowners for increasingly scarce returns.

The front-loaded, tiered tender offer is derived from hostile corporate takeovers; thus, a tiered transfer program may create the misperception of the locality coercing already-threatened property owners instead of trying to make them whole and keeping them financially solvent. One way to avoid this misperception would be to assure that the compensation offered at each tier – and the differences between the tiers – are used to fairly distribute a finite amount of certain compensation benefits, or could even be tailored into a "sunset" provision, used to attenuate or even extinguish over time the locality's involvement in the TDR program as its ends are achieved. A government program that naturally provides for its own extinction could also alleviate the anxieties of certain political constituencies that prefer minimal governmental involvement in the management of private property.

Political and Cultural Considerations

As noted earlier, a significant success element in implementation of a TDR program is constituent support. This can be difficult in communities where protection of private property rights is a fundamental concern. Some members of the community may view TDRs as a form of a "taking" or as government intervention with private property rights. (See, for example, the prior discussion re: Virginia Beach's experience with proposing TDRs during the early 1990's where the community reaction was one of opposition in part due to the perception of excessive government intervention.)

An additional level of tension may arise when using TDRs in response to sea level rise and recurrent flooding. Some minimize existence of the climate change impacts. For some, going under water literally may not be a potential reality to necessitate a TDR program. Increased education and honest, persuasive messaging – in combination with the documentation of the frequent flooding of streets and parking lots – can help shape the understanding of the need.

Proposal A - "Traditional TDR"

The proposal chart below sets forth a series of traditional approaches to a TDR program for Mathews County, the Middle Peninsula, and the Tidewater Region. These proposals apply the basic TDR features and components analyzed above to stimulate supply and demand in each scenario. Note that they vary in the following ways:

• In a traditional TDR program, sending area rights holders receive "bonus" density to sell to developers in the receiving areas. This difference of county-, area- and, region-wide bonus levels aims to compensate for the varying size of the program's "market";

the higher density bonus in Mathews County attempts to incentivize resettling incounty, in the interest of preserving the Mathews County culture, community, and tax base.

- The varying downzoning adjusts for the different size of the TDR market, from Mathews County (relatively small) to the Tidewater Region (relatively large).
 Aggressive downzoning induces developers to enter the market. The sheer difference in scale at the larger market should be enough to achieve a demand for rights sufficient to compensate the threatened property owners.
- Deferred taxes (common to all scenarios) is chiefly meant to avoid any actual or perceived penalty to any receiving area developer or sending area property owner, while they navigate the TDR transaction.

Traditional TDR					
	Mathews County	Middle Peninsula	Tidewater Region		
Supply	Impact fee (sender)	Impact fee (sender)	Impact fee (sender)		
	TDR bank	TDR bank	TDR bank		
	Defer taxes on rights until severance (sender)	Defer taxes on rights until severance (sender)	Defer taxes on rights until severance (sender)		
	High density bonus (receiver)	Moderate density bonus (receiver)	Low density bonus (receiver)		
	30 years to exercise (sender)	20 years to exercise (sender)	20 years to exercise (sender)		
	Tiered "tender offer" model (sender)	Tiered "tender offer" model (sender)	Tiered "tender offer" model		
Demand	Aggressive downzoning	Moderate downzoning	Minimal downzoning		
Potential legislative	State law	State law	State Law		
changes		Interjurisdictional agreements	Interjurisdictional agreements		
	Zoning ordinance	Zoning ordinance	Zoning ordinance		

Proposal B - "Nontraditional TDR"

Bonus density, used in a traditional TDR program, may not always be the solution for creating demand for development rights. For some localities, such as Frederick County, VA, offering bonus density in exchange for rights failed to work because of the low general demand for residential development. This proposal suggests an alternative to the traditional bonus density as a TDR feature. By providing an incentive other than increased residential density, a county might achieve greater success.

One strategy is using local projects as the driver for the purchase of TDRs from property owners by private developers. As previously referenced in this paper, the

Economic Development Strategy identifies the economic development initiatives of the Middle Peninsula, and leaves for elected officials the possibility to link some of these initiatives to a TDR program. For example, Mathews County might offer expedited permit processing to a private silviculture company if it built a pellet plant in the County and purchased TDRs from sending area property owners. The projects and goals set out in The Economic Development Strategy offer creative ways for the Middle Peninsula to generate the funds for achieving the goals of a TDR program.

Low-lying coastal areas like Mathews County might also consider linking the TDRs to wetland mitigation credits as an alternative to bonus density. The County might consider brokering a transaction that "converts" the bonus densities into wetland mitigation credits which the County has established through conversion of the sending area properties upon the severing of the development rights. Developers in need of these credits, either in the county or in the region, could purchase them from the county with all or a part of the purchase price compensating the sending property owner. As in a traditional TDR program, this approach preserves a landowner's property value, while simultaneously accomplishing the locality's land use goals.

Conclusion

The concept of TDRs as a vehicle for providing economic relief to properties threatened by sea level rise or recurrent coastal flooding while serving to move development away from these shoreline areas is one which could offer the Middle Peninsula and Mathews County a new avenue for moving forward. This paper does not look at whether any of the specific proposals or creative alternatives are allowable under Virginia's existing TDR enabling law. Should the concept merit detailed consideration, and one of the alternatives – or some other alternative – generate discussion and deliberation, the next step is to establish the framework for the alternative and then take steps to ensure implementation through necessary changes to local and/or state law.

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- 9 See id.
- ¹⁰ Telephone Interview with Jeryl Rose Phillips, Comprehensive Planning Coordinator, City of Virginia Beach (Oct. 20, 2015).
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- 15 *Id*.
- 16 Id.
- ¹⁷ See Pruetz and Standridge, supra note 1.
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- 19 Pruetz and Standridge, supra note 1, at 82.
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- 21 *Id*.
- ²² Pruetz and Standridge, *supra* note 1, at 82.
- ²³ Zoning districts that prohibit development densities greater than one unit per five acres are typical examples of "strict sending area regulations." *Id.* at 83.
- 24 Id.
- 25 Id.
- 26 See id.
- ²⁷ Id. But see, Kate Kramer, "Coastal Preservation and Transferred Development Rights," Sea Grant Fellows Publications (2010), http://docs.rwu.edu/cgi/viewcontent. cgi?article=1016&context=law_ma_seagrant (analyzing TDRs under the Takings Clause and concluding that TDRs do not rise to the level of a taking).
- ²⁸ Customized receiving areas are ranked second in the success factors listed above.
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- зо *Id*.
- 31 *Id.* at 124.
- 32 *Id*.
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- ³⁴ Qualifying recreational land or improvements, for example. *Id.* at 68.
- Virginia Employment Commission, Community Profile- Middle Peninsula PDC 10 (2015).
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