

BFJ Planning

AGENDA

Canandaigua TDR

Kick-Off Meeting
July 14, 2016

- 1. Introductions**
- 2. NYSERDA Grant**
 - TDR Toolbox
 - Demonstration Projects
- 3. Overview of TDR Toolbox**
- 4. Local Issues Related to TDR in Canandaigua**
 - Comprehensive Plan
 - Padelford Brook Greenway Plan
 - Agricultural Enhancement Plan
 - Incentive Zoning
- 5. Canandaigua TDR Outline**
 - Overview of potential scope of work
 - Identify specific tasks for BFJ
- 6. Next steps**
 - Develop timeline based on discussion of scope of work

BFJ Planning

TDR Demonstration Projects

Scope of Work

The following scope of work is meant to reflect the full body of information that will be included in the Demonstration Project report. Early conference calls with Town staff will determine the nature of the study and much detailed work is required by BFJ on each task. The goal is to provide the Town with a conceptual outline of how a TDR program may work. Hopefully this outline will provide guidance to the Town and help the Board and staff determine if TDR is an appropriate tool in Canandaigua. BFJ plans to coordinate closely with the Town and consulting planners to ensure that our work is supportive, does not duplicate work that has been completed or is being done by others, and helps move the Town towards greater understanding of how a TDR program could work in Canandaigua.

Town of Canandaigua TDR

1. Meetings and ongoing coordination

Objective of meetings with Town officials, staff, and stakeholders is to identify work being done by others; understand Town objectives that TDR could address, including preservation, and learn about issues and real estate characteristics from local stakeholders.

- Initial meetings with the Director of Development, consulting planner, Town Supervisor, and Citizen Implementation Committee will guide the nature of the study.
- Future meetings can be scheduled as appropriate, depending on the nature of the study, with the Town Board, Town Assessor, and additional stakeholders (e.g., property owners, development community, neighborhood organizations, etc.).

2. Review and summary of existing materials

Brief summaries of existing materials will provide background information for BFJ and for inclusion in the Demonstration Project report.

- Canandaigua Comprehensive Plan, 2011.
- Padelford Brook Greenway Plan, 2015.
- Town of Canandaigua Agricultural Enhancement Plan, Draft May 2016.
- Existing Zoning Code.

3. Description of Potential Sending and Receiving Areas

Conceptual boundaries of Sending and Receiving Areas may already be identified by Town staff. If so, BFJ's role will be limited to understanding real estate characteristics to guide development of the transfer formula.

- Definition of boundaries and land use characteristics.
- Description of real estate market [recent sales, other information from assessor].
- Evaluation of land use objectives in sending and receiving areas [types of land that can be protected, benefits of targeted increase in density, discussion of amount of density/height increases that would be acceptable to the community].

BFJ Planning

4. Transfer mechanism options

This task will include a description of types of transfer mechanisms that are evaluated and the methodology used for establishing a mechanism for the Town.

- Comparison between real estate market and land use types between sending and receiving areas.
- Evaluation of types of transfer mechanisms [transfer based on square footage, number of units, FAR, etc.].
- Potential role of Development Land Bank.

5. Development of transfer formula concept

- Determination of calculation and methodology for executing transfer.
- Formula may be based on a transfer of number of units, buildable area, balance between market value as estimated by the Town assessor in sending area and estimated market value in receiving area, etc.
- Cost of TDR credits may be based on a set value (e.g., a certain price per unit or square footage), a percentage of market value as estimated by the Town assessor, or market-based negotiation between two land owners and/or between land owners and a Development Land Bank.

6. Outline of potential zoning code revisions

BFJ can provide review and support as needed in drafting zoning code updates—however, we defer to the Town's consulting planner on the degree of our involvement.

Transfer of Development Rights Toolbox for New York Municipalities: Combining TDR with Smart Growth

Prepared for:

New York State Energy Research and Development Authority

Joseph Tario
Senior Project Manager

and

New York State Department of Transportation

Mark Grainer
Project Manager

Prepared by:

BFJ Planning

with

**New York University Rudin Center
for Transportation Policy and Management**

New York, NY

Georges Jacquemart
Principal

Simon Kates
Associate

Notice

This report was prepared by BFJ Planning in the course of performing work contracted for and sponsored by the New York State Energy Research and Development Authority and the New York State Department of Transportation (hereafter the "Sponsors"). The opinions expressed in this report do not necessarily reflect those of the Sponsors or the State of New York, and reference to any specific product, service, process, or method does not constitute an implied or expressed recommendation or endorsement of it. Further, the Sponsors, the State of New York, and the contractor make no warranties or representations, expressed or implied, as to the fitness for particular purpose or merchantability of any product, apparatus, or service, or the usefulness, completeness, or accuracy of any processes, methods, or other information contained, described, disclosed, or referred to in this report. The Sponsors, the State of New York, and the contractor make no representation that the use of any product, apparatus, process, method, or other information will not infringe privately owned rights and will assume no liability for any loss, injury, or damage resulting from, or occurring in connection with, the use of information contained, described, disclosed, or referred to in this report.

NYSERDA makes every effort to provide accurate information about copyright owners and related matters in the reports we publish. Contractors are responsible for determining and satisfying copyright or other use restrictions regarding the content of the reports that they write, in compliance with NYSERDA's policies and federal law. If you are the copyright owner and believe a NYSERDA report has not properly attributed your work to you or has used it without permission, please email print@nyserda.ny.gov.

Acknowledgments

BFJ Planning would like to thank the New York State Energy Research and Development Authority and the New York State Department of Transportation for their support of this study. Project Managers Joseph Tario and Mark Grainer provided invaluable guidance and support throughout the process.

Table of Contents

Notice	ii
Acknowledgments	iii
List of Figures	v
List of Tables	v
1 Introduction.....	1
2 Defining Transfer of Development Rights	4
2.1 Components of TDR	4
2.1.1 Zoning Amendments	4
2.1.2 Sending District	4
2.1.3 Receiving District.....	5
2.1.4 Transfer Formula.....	7
2.2 TDR Mechanisms.....	8
2.2.1 Traditional TDR	8
2.2.2 Density Transfer Charge	9
2.3 Benefits of TDR.....	11
2.3.1 Land-Use Benefits.....	11
2.3.2 Economic Benefits.....	11
2.3.3 Environmental Benefits	12
3 TDR in New York State	13
3.1 Legal Framework	13
3.2 Description of New York State TDR Programs	14
4 Municipal Process for TDR	16
4.1 Step 1: Establish the Need for a Land Use Solution.....	16
4.2 Step 2: Comprehensive Plan Update or Amendment.....	16
4.3 Step 3: Zoning Code Amendments.....	17
4.4 Step 4: SEQRA	18
4.5 Step 5: Record Preservation Easements.....	18
5 Establishing the Transfer Formula	19
5.1 Traditional TDR	19
5.1.1 Average Home Size	20
5.1.2 Comparison between Traffic Generation Rates.....	20
5.1.3 Transfer from Residential to Other Land Uses	20
5.2 Density Transfer Charge	22

5.3	TDR Costs and Financing	22
6	Quantifying TDR Benefits	25
7	Demonstration Projects	27
7.1	Lessons Learned.....	27
7.2	Challenges and Limitations	28
Appendix A		A-1

List of Figures

Figure 1.	Transfer of Development Rights from an Agricultural Area to a Commercial Center	1
Figure 2.	Butterville Road in New Paltz, NY	5
Figure 3.	New Creek Bluebelt in Staten Island, NY	5
Figure 4.	Hulfish Neighborhood in Princeton, NJ	6
Figure 5.	Glenn Falls, NY.....	7
Figure 6.	Traditional TDR.....	8
Figure 7.	Density Transfer Charge.....	9

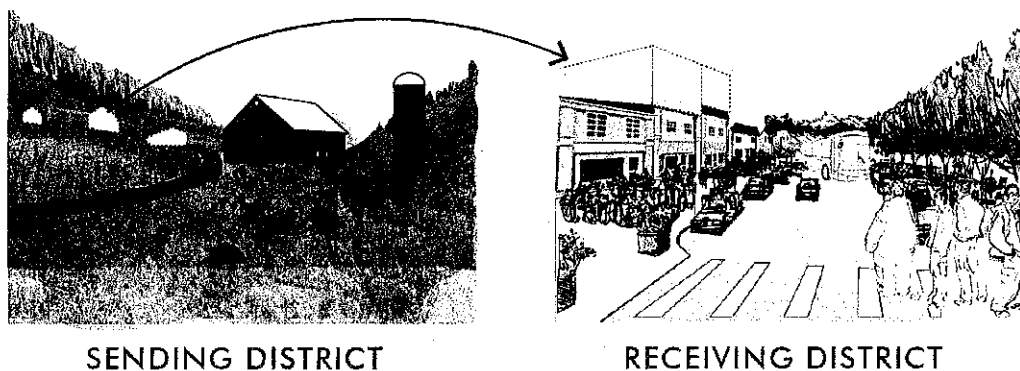
List of Tables

Table 1.	Residential Traffic Generation Rates (Per Unit).....	20
Table 2.	Comparative Traffic Generation Rates	21
Table 3.	Sources of Local Financing for Open Space / Development Rights Acquisitions	24

1 Introduction

Transferring development from areas that communities want to preserve to other areas where growth can be accommodated in an efficient and environmentally sound manner can bring substantial benefits to a community. Many municipalities want to protect environmentally sensitive areas, agricultural fields, view corridors, historical buildings and flood-prone areas from development and redirect growth to areas that have or allow certain densities, land-use mixes and infrastructure, including possible transit service. The Transfer of Development Rights (TDR) is a regulatory strategy that allows communities to preserve valuable assets in a sending district, without hurting the economic interests of the property owners in that zone, and to generate growth in a receiving zone that is efficient from an environmental, economic and community perspective.

Figure 1. Transfer of Development Rights from an Agricultural Area to a Commercial Center



Combining TDR with transit-oriented development (TOD) creates a tremendous synergy between these two smart growth strategies. Typical TOD encourages development that has high proportions of transit, bicycle, and pedestrian travel and low proportions of automobile travel—but still generates auto travel. However, the combination of TOD and TDR can facilitate replacement of auto-oriented development with transit/bicycle/pedestrian-oriented development, with the potential to significantly decrease vehicle miles of travel and greenhouse gas emissions.

Recent extreme weather events in New York State, including Superstorm Sandy, Tropical Storm Lee and Hurricane Irene, have shown that many waterfront zones in the State are vulnerable and may need to be protected from future development. Preservation of flood-prone areas from development can help to promote living shorelines that act as a buffer against storm surge, and provides a strategy to protect residents living in newly designated flood zones. Defining those flood-prone areas as TDR sending districts and allowing the development rights to be transferred and sold somewhere else will make it easier for municipalities to permanently protect those areas from further storm damage. These TDR sending districts could also allow property owners to realize some economic value of their property that they otherwise would have lost due to increased flood risks and rising flood insurance rates.

Even though New York State has legislation in place that allows the transfer of development rights, there have been relatively few applications of this very efficient land-use tool in the State. The main reasons for this limited success are that the applications of TDR can be complicated, and its implementation and maintenance requires resources and commitment on the part of the municipality that may be beyond local capabilities.

The purpose of this toolbox is to explain TDR in its various forms and to assist New York municipalities in implementing the most appropriate TDR process for their community. The TDR Toolbox will help facilitate the establishment of TDR ordinances and overcome obstacles that may stand in the way so that municipalities can preserve desirable conservation areas and encourage smart growth. The Toolbox explains how TDRs are coordinated with local zoning regulations and the New York State Environmental Quality Review (SEQR) process. The intent of the TDR Toolbox is to make the process of developing, implementing and administering a TDR program as predictable as possible.

The toolbox focuses on the transfer of development rights within a municipality, as opposed to inter-municipal TDRs. Inter-municipal TDRs can have substantial benefits as shown by the Pine Barrens TDR on Long Island. However, inter-municipal TDRs are more complex and require several municipalities to agree on the TDR components, including the sending and receiving districts, and a development rights bank. At this stage, inter-municipal TDRs also need to be approved by the New York State Legislature.

Nationwide, many TDR programs prioritize preservation efforts of sensitive lands in sending districts and are less concerned about the characteristics of receiving districts, other than to ensure that these zones can accommodate the additional density and that there is a market for the higher-density development. Consequently, the transfers tend to occur from a zone with single-family homes to another zone with single-family homes, thus facilitating the transfer equation. A primary goal of the TDR Toolbox is to emphasize the advantages of transferring development into districts that can accommodate more efficient and sustainable growth. These would be areas with more significant infrastructure (including transit options), and greater densities and mixes of uses where the transfer may occur into multi-family dwellings or non-residential uses. The toolbox therefore includes transfer formulas that allow the transfer from single-family homes to other types of dwelling units and other uses.

2 Defining Transfer of Development Rights

2.1 Components of TDR

2.1.1 Zoning Amendments

TDR is anchored in zoning legislation and the establishment of TDR in a municipality follows the same process as any zoning change. Based on some initial land-use objectives, the municipality undertakes a Comprehensive Plan update and then implements the zoning amendments that define the TDR. This process, together with the related public outreach and environmental impact assessments, will be described in Section 4. The sending and receiving districts must be designated and mapped with specificity (just like any other type of zoning district). They may overlay with existing zoning districts or they may be newly defined districts. Establishing zoning overlay districts is a very common approach for sending and receiving areas. They need not be coterminous with zoning districts.

2.1.2 Sending District

Sending districts are defined as one or more designated land areas in which development rights may be designated for use in one or more receiving districts. In short, they are the areas from which development rights may be transferred. Examples are shown in Figure 2 and Figure 3. Often, the zoning regulations applicable to the sending districts will be amended to reduce or eliminate further development. In some cases, however, there may be no need to change the zoning regulation in the sending district. In this case, the municipality would rely upon the market value of development rights in the receiving district to induce transfer of development from the sending district. The sending district must consist of natural, scenic, recreational, agricultural or open land resources, or sites of special historical, cultural, aesthetic or economic values sought to be protected.

The enabling legislation that allows TDR in New York State provides that when development rights have been transferred from property in the sending district, the grantor of those rights must execute a conservation easement, which would then result in reduced property taxes for the property in the sending district.

Figure 2. Butternut Road in New Paltz, NY



Figure 3. New Creek Bluebelt in Staten Island, NY



2.1.3 Receiving District

The receiving district is defined to mean one or more designated areas of land to which development rights generated from sending districts may be transferred, and in which increased development is permitted to occur by reason of the transfer (Figure 4 and Figure 5). Development in the receiving districts would thus occur at a greater density than otherwise allowed by zoning, with the increased density contingent upon transfer and attributable to the development rights that were transferred from the sending districts. Great care must be taken with the receiving district designation for two reasons. First, there should be a market for development rights in the receiving district to entice property owners to use

the TDR program. Second, the transfer will necessarily result in an increase in the density or intensity of development in the receiving area, which means that municipal services must be available to support it. Consequently, the community needs to be aware of the potential impact of such development.

It is critically important that receiving districts are carefully and thoughtfully designated so that the land included in them can accommodate the increased density. The New York State statute also provides procedures to be used when specific development increases occur in the receiving district, including the provisions of the State Environmental Quality Review Act (SEQRA). The statute requires review of the environmental impacts of the TDR plan if the land use impacts of the TDR were not reviewed in the generic environmental impact statement (GEIS) that was prepared in connection with the municipality's comprehensive plan. In this case, a municipality would be required to issue an amendment or update to its comprehensive plan, accompanied by a new or supplemental GEIS as part of the process for implementing a TDR program. Municipalities are encouraged to complete this process upon implementing a TDR program so that developers are not forced to complete their own EIS for each TDR transaction, facilitating buy-in by property owners.

Figure 4. Hulfish Neighborhood in Princeton, NJ



Figure 5. Glenn Falls, NY



2.1.4 Transfer Formula

The transfer formula quantifies how development units in the sending district are realized in the receiving district. The most common formula transfers floor area on a one-to-one basis. However, if the transfer occurs from a low-density area to a higher-density area, there may be a need to establish a transfer formula that equates the development right from one single-family home to more than one multifamily unit because the proportional infrastructure cost impacts of a multifamily unit are lower than for a single-family dwelling in a low-density area. This transfer to more than one unit may also be required to make the TDR financially feasible and to adequately compensate the property owner in the sending district for selling their development rights, especially in the case when TDR is combined with more restrictive zoning.

The transfer formula could be based on the average sizes of single-family homes compared with the average sizes of apartment units or comparative traffic generation rates. Municipalities can incorporate additional incentive factors into the transfer formula to encourage developers to address other municipal objectives into development in the receiving district. Incentive factors provide additional development rights in exchange for including these objectives in new development. For example, incentive factors could include provisions of a certain number of affordable housing units or achieving a specified green building certification standard (e.g., LEED, ENERGY STAR®, etc.).

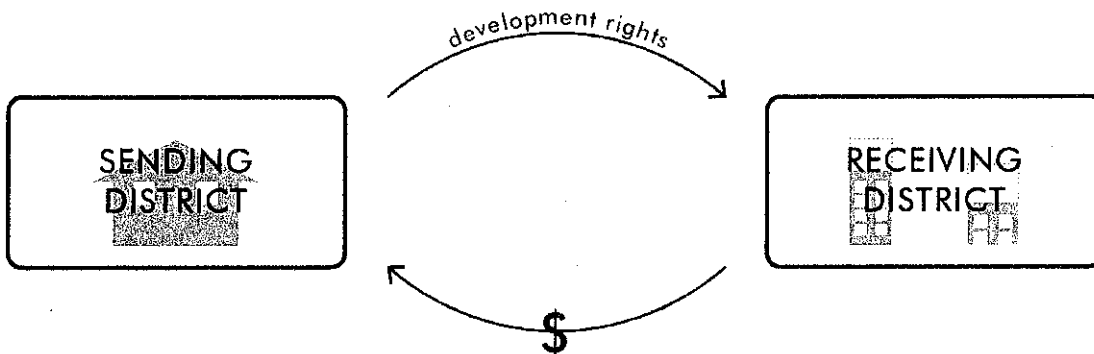
2.2 TDR Mechanisms

Traditional TDR and Density Transfer Charge are the two basic types of TDR mechanisms. Municipalities can implement either type of mechanism to incentivize property owners to transfer development rights to preserve land in sending districts and encourage more efficient development in receiving districts. In some cases, municipalities may elect to create a TDR program that includes elements of both types of mechanisms.

2.2.1 Traditional TDR

Traditional TDR involves a private transaction between two property owners (Figure 6). In this version of TDR, the owner of property in the receiving district negotiates and purchases development rights from the owner in the sending district. In exchange, the property in the receiving district is allowed additional development rights based on the transfer formula. Meanwhile, a deed restriction is attached to title of the property in the sending district creating a conservation easement and reducing the property taxes of the owner in the sending district.

Figure 6. Traditional TDR



To avoid legal challenges, municipalities must be careful to implement TDR in a way that still allows property owners in the sending district to realize some economic value for their property. A Traditional TDR could be implemented in conjunction with a more restrictive zoning in the sending district; however, there needs to be a guarantee that there is a ready market in the receiving district to purchase the development rights from the downzoned property owner. Zoning changes associated with a TDR program

do not necessarily have to remove all ability to develop in the sending district. Traditional TDR could be implemented with no zoning changes or moderately reduced development densities in the sending district. These scenarios would reduce the risk to the municipality of a regulatory taking, but would also give the TDR program less influence over future development in the sending district.

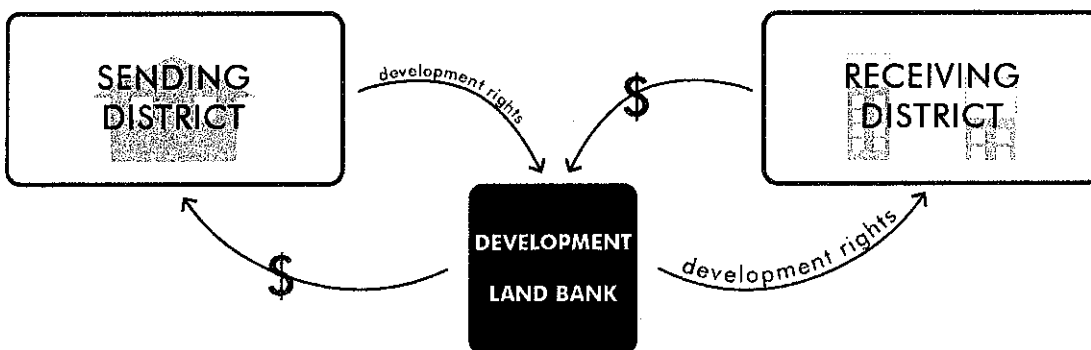
The disadvantage of the traditional TDR is that the community has no direct control on which properties in the sending district will ultimately be preserved. This scenario is dependent upon private transactions between property owners in the receiving district and property owners in the sending district. Developers in the receiving district will attempt to strike the best deals they can with property owners in the sending district who are most eager to sell development rights. This action may not represent the most valuable properties from the preservation point of view. However, as long as the municipality has carefully determined the boundaries of the sending district to include land that is generally deemed worth protecting, there could still be a significant preservation benefit.

To be successful, a traditional TDR needs to have a transfer formula that makes it attractive for a property owner in the receiving district to pay an amount of money that is high enough to induce a property owner in the sending district to sell his or her development rights.

2.2.2 Density Transfer Charge

An alternative type of TDR is known as Density Transfer Charge (Figure 7). In this version, a property owner in the receiving district may pay a fee to the municipality in exchange for an incremental increase in development rights. The municipality uses the revenue generated to establish a development land bank that can purchase development rights in a designated sending district. The development land bank, which is administered by the municipality, can then use revenue to purchase development rights.

Figure 7. Density Transfer Charge



Unlike Traditional TDR, the Density Transfer Charge could be more easily implemented in a zoning update that significantly decreases the allowable density on properties in the sending district. Because the sale of development rights in the sending district is not dependent upon market factors, a municipality could restrict or substantially reduce development rights in the sending district without severing an owner's ability to realize the value of his or her property. In that case, the development land bank established by the municipality would step in and purchase property or development rights in the sending district.

One consideration in this case is that the municipality may want to secure seed funding to establish the development land bank even before the purchase of any development rights in the receiving district. That way, the municipality would be prepared to purchase conservation easements even if it does not receive immediate interest in purchase of development rights in the receiving district. This seed funding can be established through a budgetary allocation by the municipal elected officials or through a municipal referendum that would raise a one-time property tax surcharge. A potential source of seed funding to establish a municipality's development land bank may be possible through the Farmland Protection Implementation Grants (FPIG) program administered by the New York State Department of Agriculture and Markets. FPIG provides funding for activities such as conservation easement projects to protect viable agricultural land from future non-farm development. In using an FPIG award to acquire development rights on a property within its sending district, the municipality effectively leverages State monies to cover the majority of the expenses (including all transaction costs) associated with acquiring the development rights that will become the initial deposit into that municipality's bank.

A significant advantage of the Density Transfer Charge mechanism is that it simplifies the purchase of the development rights for the owner in the receiving district. The owner/developer only has to write a check to the municipality for the amount of incremental development rights rather than negotiate with a property owner in the sending district. The other important advantage of the Density Transfer Charge is that it allows the municipality to prioritize and target those properties in the sending district that are most valuable in terms of preservation.

Note that the TDR mechanism could combine the traditional TDR system with the Density Transfer Charge, in effect, allowing the property owner/developer in the receiving district to choose either alternative. In this case, a smaller developer may choose the Density Transfer Charge because it is simpler from an administrative point of view, whereas a larger development company may prefer to negotiate the purchase of development rights at a larger scale.

2.3 Benefits of TDR

TDR programs can provide benefits to property owners in both sending and receiving districts. If the program is well designed, it can avoid the risk of litigation associated with a downzoning while also meeting the needs of a wide range of stakeholders. By compensating property owners in the sending district for releasing their development rights, TDR is a more acceptable mechanism than pure downzoning or creating urban growth boundaries. TDR may be most attractive for property owners in the sending district in areas where a full build-out is unlikely—in this case, TDR has the potential to preserve land from development while also providing economic value for the property owners. An additional advantage of TDR as a land-use control tool is that it is market-driven. Implementing TDR in conjunction with smart growth has the potential to achieve several municipal objectives, as outlined in this section.

2.3.1 Land-Use Benefits

The potential land-use benefits of TDR for sending districts are generally the primary reason that municipalities implement TDR programs. By combining TDR with smart growth principles, the TDR program can also provide additional land-use benefits associated with concentrating development in receiving districts with commercial centers or transit. Land-use benefits include:

- Preservation of agricultural land.
- Conservation of sensitive environmental areas.
- Protection of flood-prone areas.
- Protection of historical buildings.
- Promotion of smart growth principles.

2.3.2 Economic Benefits

Economic benefits can be broken down into five areas:

- Economic development. The increased density in the receiving area may bring additional economic activity and may improve the retail market. Increased density has the potential to increase economic opportunities for existing and future businesses in the receiving district, which may be a municipality's downtown.
- Agricultural industry. Because agricultural lands can be protected under a TDR program, the aggregation of permanently protected agricultural land helps to ensure that blocks of agricultural land are available to sustain a varied agricultural industry. Land-use benefits translate into economic benefits to the agricultural industry and that segment of the State's overall economy.

- Property owners. TDR is a popular land-use tool because it provides benefits to property owners in both the sending district and the receiving district. Sending district property owners get an opportunity to realize some economic value of their property, whereas a zoning change that removes all or some of their development rights would provide no such recourse. Receiving district property owners are given the option to acquire incremental development rights, allowing for construction of a greater number of units than would have been allowed under existing zoning.
- Property values. Conservation of environmentally sensitive land and open space areas has the potential to increase property values for adjacent property owners.
- Municipal finances. Higher-density development has less intensive infrastructure requirements per dwelling unit than low-density development (e.g., lane miles of roads, length of utility connections, fire, and police), requiring lower property taxes per unit. TDR can guide development toward areas with adequate and efficient infrastructure, away from lower-density areas where infrastructure is more costly.

2.3.3 Environmental Benefits

The deed restrictions that create conservation easements on property in sending districts have the benefit of being permanent conservation commitments, whereas zoning amendments are always subject to potential changes. This permanency represents a significant long-term environmental benefit.

By shifting development from sprawling areas to smart growth areas, there is an opportunity to significantly reduce vehicle miles of travel and greenhouse gas emissions. The reduction comes from greater percentages of pedestrian, bicycle and transit trips in the receiving district compared with the sending district, and also by the fact that the vehicle trips are likely to be shorter in the receiving districts.

The preservation of land with all its natural amenities is a benefit that is appreciated by residents in both sending and receiving districts and allows for permanent use of the sending districts for recreational or environmental purposes.

3 TDR in New York State

3.1 Legal Framework

The use of the TDR technique is authorized in New York State by Town Law § 261-a; Village Law § 7-701; and General City Law § 20-f. These sections were added to the zoning enabling legislation in 1989. These statutes define TDR as “the process by which development rights are transferred from one lot, parcel, or area of land in a sending district to another lot, parcel, or area of land in one or more receiving districts.” The statutes also state that the purpose of providing for transfer of development rights is to “protect the natural, scenic or agricultural qualities of open lands; to enhance sites and areas of special character or special historical, cultural, aesthetic or economic interest or value; and to enable and encourage flexibility of design and careful management of land in recognition of land as a basic and valuable natural resource.”

Planning objectives for TDR might include preservation of open space, agricultural lands or areas of particular scenic or environmental concern. In addition, these objectives might call for protection of developed areas where new development is not desired, such as historic sites, groupings of historic structures, or low-rise waterfront development that is part of a community’s cultural heritage or is important to the economy of the municipality. The breadth of the statutory purposes would allow the use of TDR to implement a wide range of planning objectives.

Because it permits the transfer of the right to develop land (thus permitting some economic return without actually building on land) the TDR technique may prevent successful legal challenges to very restrictive zoning controls adopted in pursuit of preservation or environmental protection goals. However, as was shown in the precedent legal case of *Fred F. French Investing Co. v. City of New York*, the severance of the development rights does not in itself guarantee an economic return for the owner. When the revised zoning in the sending district substantially reduces the permitted development, there also needs to be a market for the transferred development rights. These more restrictive TDRs require a receiving district with a reasonable demand for development and a transfer formula that allows an economic gain that corresponds reasonably to the development value of the property in the sending district. Restrictive zoning in the sending district dictates that to realize the economic value of their property, the property owners in the sending district must sell the development rights. However, if they are not concerned about their development value, they do not need to sell the development rights.

The enabling statute defines the term “development rights” to mean the rights that are allocated to land and which may, under TDR, be transferred. The statute defines the term very broadly, so that essentially any measure of such rights that is deemed by the municipality to be appropriate is allowable, as long as it is used in a reasonable and uniform manner. An efficient TDR program usually establishes some method of valuing the development rights that are transferred. Thus, for example, a local TDR provision may define development rights in units per acre, or in square feet of floor area, or in height of structures, among others. It may establish rights in terms of credits that may in turn be sold.

To create a TDR program, a municipality must enact TDR as part of its zoning regulations. This means that TDR—and the sending and receiving districts—will be established in accordance with a comprehensive planning process. The importance of planning, and of relating the sending and receiving districts to an overall land-use policy that is in the best interests of the community, is central to the provisions of the TDR statute.

The New York statute requires the legislative body (City Council, Town Board or Village Board), in considering the designation of sending and receiving districts, to evaluate the impact of TDR on the potential development of low- or moderate-income housing that would be lost in the sending districts and gained in receiving districts. The legislative body must find that there is “approximate equivalence” between lost opportunities for such housing in the sending district and gained opportunities in the receiving district, or that the municipality has taken or will take reasonable action to compensate for any negative impact on the availability or potential development of such housing caused by TDR.

3.2 Description of New York State TDR Programs

New York State has a long history of effective TDR programs, most notably in New York City and in the Long Island Pine Barrens. *The TDR Handbook*, published in 2012 and described in the Appendix, includes a list of municipal programs by state, and shows that in 2011 there were 16 programs in New York. However, a search of the towns identified in the TDR Handbook reveals that some have removed code language that allows for TDRs, while others have updated their comprehensive plans to remove language that encourages TDRs in response to the difficulties in maintaining a successful TDR program.

For example, in 2014 the Town of Lysander announced the development of a new Comprehensive Land Use Plan, replacing the previous plan last updated in 1991.¹ In a November 2014 article, the plan's committee chair described the elements of the new plan, including replacing the 2007 TDR program that he said was "non-functional."² The plan replaces the program with two incentive zoning options: one option allows developers to build higher-density developments in exchange for expanding the sewer system, and the other option recommends the creation of a new agricultural district and provides tax benefits and high-density development benefits in return for preservation of these districts.

Nevertheless, some of the State's programs have successfully incentivized high-density development in designated receiving areas and preservation of open spaces or historic resources in designated sending areas. The various TDR mechanisms in New York City, as well as their benefits and challenges, have been well documented over time.³ Similarly, the Long Island Pine Barrens multi-municipal program has been written about extensively and has its own website.⁴ This program is described in more detail in the following section.

Although the Town of Lysander lies on one end of the TDR program spectrum and New York City and the Long Island Pine Barrens lie on the other, the remaining programs sit somewhere in the middle. That is, they have had varying degrees of institutionalization and success. See the Appendix for a brief overview of the remaining 13 New York State programs identified in the TDR Handbook.

¹ Casey, Ashley. Lysander to Present New Land Use Plan Nov. 13. Baldwinsville Messenger. 4 Nov 2014. <http://www.baldwinsvillemessenger.com/news/2014/nov/04/lysander-present-new-land-use-plan-nov-13/?page=2&>

² Ibid

³ One excellent resource is the recent New York City Planning Survey of TDR Mechanisms in New York City, (<http://www.nyc.gov/html/dcp/html/tdr/tdr-1.shtml>)

⁴ Pine Barrens Credit Program Homepage, http://www.pb.state.ny.us/chart_pbc_main_page.htm

4 Municipal Process for TDR

This section outlines the process that New York State municipalities should follow to enact TDR legislation in their communities. This process is meant to provide guidance to planning staff on how to achieve TDR objectives so they know what to expect. The key step is updating or amending the Comprehensive Plan; unless a municipality's existing plan is supportive of the land use changes that a TDR program would create, changes to the Comprehensive Plan must be made so that the TDR program is consistent. Updating or amending the Comprehensive Plan triggers SEQRA requirements, which can be a lengthy but important step in evaluating the environmental impacts of zoning and land use changes.

4.1 Step 1: Establish the Need for a Land Use Solution

The first step at the municipal level is to define the land use objectives that TDR will address. As previously described, some common objectives include preservation of farmland, protection of environmental areas or historic preservation. In the years after Superstorm Sandy, Hurricane Irene, and Tropical Storm Lee, retreat from flood zones is another potential objective that may apply in coastal and riverine communities. While these are examples of some common land use objectives that could be addressed using TDR, New York State legislation does not limit the use of TDR to any set land use objectives. Combining these objectives with smart growth principles in Receiving Districts can achieve even greater benefits.

4.2 Step 2: Comprehensive Plan Update or Amendment

Changes to the Comprehensive Plan could be achieved with a targeted amendment that only addresses the TDR program, or could be a part of a larger update if the plan is outdated or if there are other components that the municipality also wants to revise. One benefit of the comprehensive planning process, particularly with regard to TDR, is the public outreach component that allows local stakeholders to weigh in and provide comment. Public input may help guide the details of the TDR plan, including boundaries of the sending and receiving districts, degree of zoning restrictions placed on the sending district and allowable density bonuses in the receiving district. Public input can also help to build support and buy-in among the community. Ultimately, the Comprehensive Plan should include recommendations and provide policy guidance for the municipality's TDR program.

The municipality has two options for coordinating Comprehensive Plan changes and Zoning Code Amendments. The first option is to complete any changes to the zoning code at the same time that the Comprehensive Plan is updated or amended. The benefit of closely coordinating the Comprehensive Plan with Zoning Code changes is that it simplifies the SEQR process. In this case, a single GEIS would be completed that applies to both the Comprehensive Plan and the Zoning Code changes.

The second option is to amend the Zoning Code as part of a separate process upon completion of the Comprehensive Plan. Although there may be locally specific reasons for separating the two approval processes, by changing the zoning after updating or amending the Comprehensive Plan, a municipality would be required to complete an additional Environmental Assessment Form (EAF) upon adopting the new zoning. Although the EAF should produce a negative declaration as long as the zoning changes are consistent with the adopted Comprehensive Plan, this extra step could be avoided through greater coordination between the Comprehensive Plan update or amendment and the subsequent changes to the Zoning Code.

4.3 Step 3: Zoning Code Amendments

Under New York State law, Zoning Code amendments must be consistent with a “well considered plan” or Comprehensive Plan,⁵ so any changes to the Zoning Code must follow upon the adoption of an amendment or update of the Comprehensive Plan. Because the Zoning Code amendments would be so closely linked with changes to the Comprehensive Plan, the most efficient strategy is to adopt changes to the Zoning Code in coordination with the Comprehensive Plan amendment. If zoning changes are adopted as part of a separate process, the municipality may be required to complete two separate GEISs. The new TDR section of the Zoning Code should include the following key components:

- Maps of both the sending and receiving districts to define the boundaries where the program is applicable.
- Revisions, as applicable, to the principal permitted uses; special permit uses; and allowable building size, massing, and density in the sending district. In some cases, municipalities may enact very restrictive zoning in the sending district to preclude any new development. In this case, the transfer of development rights would remain as the only way for property owners to realize some economic value of their property (although the owner would not be required to participate in the program by selling his or her property). In other cases, the new zoning may be unchanged or minimally restrictive. In this case, the property owner is given more choice in the event he or she wants to realize economic value of property in the sending district.

⁵ Gen. City Law §20(25); Town Law §263; Village Law §7-704

- A transfer mechanism and/or density transfer charge. The process of establishing the transfer mechanism and/or density transfer charge should include outreach to the development community or consultation from a real estate market consultant in order to produce a transfer that is economically favorable to both sending and receiving district property owners.
- Procedural incentives. To provide additional incentive to developers to use the TDR regulation, municipalities may include procedural incentives in the new zoning text. These incentives could include expedited review and approvals, relaxed infrastructure and/or parking requirements or other reductions to fees and delays in the building development process. By providing time savings, cost savings and greater predictability, the zoning can be used to guide developers to use the TDR program.

4.4 Step 4: SEQRA

The State Environmental Quality Review Act (SEQRA) requires a generic environmental impact statement for substantial changes to the Comprehensive Plan, zoning and land use, including implementation of TDR legislation. Many of the issues that municipalities should expect to address as part of a GEIS in response to TDR programs result from the additional density that would be added in the receiving district. Incremental increases in development rights could be expected to result in increased traffic, greater need for parking facilities and an increase in schoolchildren, among other factors. Through the process of completing the GEIS, however, the municipality may also note that some of these impacts could be offset by equivalent reductions in the sending district.

4.5 Step 5: Record Preservation Easements

Environmental Conservation Law, Article 49, Title 3 provides for conservation easements. Conservation easements are interests in land that limit the use or development of the land. They are recorded in the chain of title so that subsequent purchasers will be aware of the particular restriction.

The municipality must adopt regulations establishing minimum uniform standards for instruments creating conservation easements within a sending district. The statute requires standards be established at the time the sending district is created. In addition, the program must provide for the reassessment, within one year, of the property tax value of any parcel whose development rights have been transferred.

5 Establishing the Transfer Formula

5.1 Traditional TDR

The transfer formula quantifies the incremental development rights gained in the receiving district based on the purchase of development rights in the sending district. Most commonly, TDR transfer formulas are based on a simple calculation of dwelling units or square feet. If a certain number of dwelling units or square feet of building area would have been allowable under existing zoning in the sending district, that same number of units or building area would then be transferred to the allowable density in the receiving district. Because this toolbox emphasizes the transfer from low-density areas to districts with more significant infrastructure, greater densities and mixes of uses, there is a need to develop a formula that allows for transfers from single-family homes in the sending district to multifamily homes or nonresidential uses in the receiving district.

Two objectives should be considered in the development of the transfer formula:

- Sufficient incentive for a developer in the receiving district to pay enough money to the property owner in the sending district to encourage that property owner to sell his or her development rights.
- A reasonable relationship of the proceeds that the property owner in the sending district gets to the value of his or her development rights.

The size of the single-family dwelling unit in the sending district will most likely be much larger than for the multifamily dwelling unit in the receiving district. The infrastructure and environmental impacts (traffic generation, greenhouse gas emissions, impact on storm water runoff, sewer lines) of a unit in the sending district will also be higher than for the unit in the receiving district. By developing a transfer formula that allows for more dwelling units in the receiving district compared to the units purchased in the sending district, a municipality can use TDR to incentivize more efficient development patterns. Each municipality may pursue a different transfer formula based on achieving a balance between compensation for the property owner in the sending district and the carrying capacity for new development in the receiving district. The following examples show how to create different types of transfer formulas that can be used to incentivize transit-oriented development over lower-density areas.

5.1.1 Average Home Size

The transfer formula could be based on the average size in the United States of single-family homes (typically 2,600 square feet) and apartment units (typically 1,000 square feet). Using these metrics, the transfer formula would allow for 2.6 apartment units in the receiving district for each 1.0 single-family home in the sending district.

5.1.2 Comparison between Traffic Generation Rates

The transfer formula could also be based on comparative traffic generation rates, as established (and commonly accepted) by the Institute of Transportation Engineers (ITE). Table 1 shows how these traffic generation rates compare for the typical peak hours (based on the 9th Edition of the ITE Trip Generation Manual 2012).

Table 1. Residential Traffic Generation Rates (Per Unit)

	Single-Family Home	Apartment
AM Peak Hour	0.75	0.51
PM Peak Hour	1.00	0.62
Average Peak Hour	0.875	0.565

Based on the above traffic generation comparison, the development right of 1.0 single-family home could be transferred into 1.55 apartment units in the receiving area. This transfer formula does not take into consideration the effect of significant transit service that may exist in the receiving area. If, for instance, the receiving area is a TOD zone with significant transit service, where the traffic generation rates for apartments may be only 50% of the ITE rates for apartments, then 1.0 single-family home in the sending area could become 3.10 apartment units in the TOD zone. Note that one could also use 24-hour traffic generation rates instead of peak-hour rates for the uses being considered.

5.1.3 Transfer from Residential to Other Land Uses

Most commonly, development rights are transferred from a residential use in the sending district to a residential use in the receiving district. However, depending on the existing zoning in both the sending and receiving districts, there may be a desire to transfer from one use to another use. In this case, a transfer formula would have to translate a certain amount of development rights from one use to a different use.

Floor-area equivalents, comparative traffic generation rates or estimated market value could be used for the transfers from single-family homes to other uses such as an office space or supermarket. In practice, the formula would be based on allowable building area under existing zoning in the sending district. If, for instance, a developer in the receiving district wanted to build an office building of 90,000 square feet, when underlying zoning allows only 60,000 square feet, the developer could buy the development rights for an additional 30,000 square feet in a sending district. If zoning in the sending district allows single-family homes of 2,600 square feet, this may mean the purchase of the development rights of 12 single-family homes ($30,000/2,600$) in the sending district.

Table 2 give the rates for a single-family home and 1,000 square feet (gross floor area) of office space if one were to use comparative peak-hour traffic generation rates for single-family homes and general office buildings.

Table 2. Comparative Traffic Generation Rates

	Single-Family Home (per unit)	Office Building (per 1,000 SF)
AM Peak Hour	0.75	0.48
PM Peak Hour	1.00	0.46
Average Peak Hour	0.875	0.47

Based on this relationship, the developer in the receiving district who wants to build an additional 30,000 square feet of office building would have to buy the development rights of 16 single-family homes, calculated as $30,000/(1000*[0.875/0.47])$. Depending on the sending and receiving districts and their allowable uses, the municipality that considers establishing a traditional TDR could set up a transfer matrix that lists the transfer ratios for various uses.

The transfer formula may also take into consideration other incentive factors that the municipality may want to consider, such as affordable dwelling units, age-restricted dwelling units or compliance with a green building certification program. These incentive factors should only apply to beneficial elements that are verifiable, such as following State regulations related to affordability definitions or LEED standards for green building. For example, a municipality wanting to encourage more affordable housing in the receiving district may decide that if a certain percentage of the new units acquired through TDR are affordable, the developer receives an additional transfer credit.

5.2 Density Transfer Charge

Establishing a Density Transfer Charge to be applied to each incremental unit in the receiving district avoids the need for a transfer formula. This transfer charge needs to be set such that there is an incentive for the property owner/developer in the receiving area to pay the charge for the additional development units that he or she receives. The Density Transfer Charge for one additional apartment unit should be less than the economic value of the additional apartment unit in the receiving district, so that there is a profit incentive for the transfer.

If the Density Transfer Charge were greater than the incremental value of additional development rights, developers in the receiving district would not elect to pay the incremental cost, because the new development rights would not repay the investment. However, if the profit generated from one additional apartment in the receiving district is \$10,000 and the Density Transfer Charge is set by the municipality at \$5,000 per unit, the property owner in the receiving district would make a 50% profit per unit and may see sufficient incentive to pay the Density Transfer Charge.

As for the transfer formula, the municipality can also apply incentive factors by lowering the Density Transfer Charge for socially desirable uses. Instead of a \$5,000 charge for a regular apartment, the charge could be lowered for a LEED certified building or for affordable apartments. Another potential application of incentive factors would be to apply them to certain types of land in a sending district. If a municipality has determined that certain areas within a larger sending district are of greater preservation value, incentive factors may be used to encourage receiving district owners to purchase development rights from that land that has a greater preservation value. Examples of how this concept may be applied could include agricultural land that is comprised of prime soils or environmental areas that provide critical habitat or flood protection benefits.

5.3 TDR Costs and Financing

Development, establishment, and management of a TDR program can be costly. Front-end costs may range from \$50,000 for a relatively simple TDR program to more than \$500,000 for a more complex effort. Simple programs are most likely to occur in relatively rural areas and the TDR transactions are between development rights sellers in the sending areas and developers in the receiving areas. Complex efforts most usually occur in developmentally and politically complex environments with the development rights transactions entailing a high degree of local government involvement including, possibly, front-end acquisitions.

Front-end costs are those involving planning and program development and organization up to the point of implementation. With the exception of the New York State Department of Agriculture and Markets *Farmland Protection /Implementation Grants* program, there are no State or federal programs specifically supporting the front-end efforts necessary to establish a TDR program.

The lack of funding for TDR planning and program development undoubtedly constrains its use. And this is likely to remain so through, at least, the mid-term as on-going local budget problems limit the ability of the large majority of municipalities to acquire expertise or consultants for other than the most direct and immediate needs.

Once a TDR program is established local management and operating costs can also vary widely. In simple programs TDR transactions may be approved by the use of qualifications and consistency checklists; sending areas protected through the use of conservation templates with the language brought back to the property deed; and development credits assigned as part of the site plan or subdivision approval process. Existing staff can do these tasks, and incremental costs would usually be small.

More complex and active TDR programs can require additional or dedicated staff and supporting resources and activities (e.g., account management for dedicated and segregated funds, auditing, etc). No full-cost accounting for on-going TDR program operations and management costs was found in preparing this toolbox but they may well exceed \$300,000 per annum or more for the larger programs.

Ongoing management and operating costs are typically funded as part of the municipal budget, either as a draw on the general fund or on funds dedicated to the TDR program.

There are, typically, no capital costs for TDR programs in which transactions are strictly between sellers (in sending areas) and developers (in receiving areas). But there may be good reasons for municipalities to consider front ending all or some of the cost of acquiring development rights. This approach allows municipalities to protect critical or priority properties and, to some extent, to direct development to priority receiving areas. It may also allow them to protect properties whose development rights would cost more than the incremental value of development in receiving districts.

Limited experience with TDRs in New York State provides little guidance on how advanced acquisition programs might be financed. Fortunately, there is broad and diverse experience around the State with directly comparable Open Space Conservation programs. In these, as presented in the Department of State's *Local Open Space Planning Guide*⁶, development right acquisitions are typically financed by the issuance of bonds. The bonds are underwritten in the majority of cases by local revenues, typically deposited to a dedicated fund. And, as shown in Table 3, the specific type and nature of local revenues for underwriting the acquisition program varies.

In evaluating and defining TDR sending areas, communities should seek to identify whether the characteristics of the property meet the criteria for support by programs that focus on farmland, forest land, groundwater and water supply recharge areas, critical habitat and others. In New York State, these programs include New York's Revolving Fund for Clean Water and Air and Environmental Protection Fund, a variety of U.S. Department of Agriculture forestry and farmland programs, and the national Land and Water Conservation Fund.

Table 3. Sources of Local Financing for Open Space / Development Rights Acquisitions

Source of Financing	Type of Revenue
Property tax revenues	Fixed amount of revenues Fixed percent of revenues
Dedicated property charges, all taxable properties	Fixed charge per lot Fixed percent of assessed value
Other revenues	Dedicate increment to sales taxes Dedicated increment to real estate transfer taxes Dedicated percent of budget surpluses
Share of one-shot or irregular revenues	Settlements of law suits Payments in lieu of taxes

⁶ New York State Departments of State and Environmental Conservation, *Local Open Space Planning Guide*, reprinted May 2007

6 Quantifying TDR Benefits

A number of metrics can be used to quantify the benefits of TDR programs and TDR strategies combined with transit-oriented development. The most direct metric is the total amount of acres of land preserved from development in sending districts. Whether agricultural land, sensitive environmental areas or floodplains, a measure of the amount of land preserved is one way to demonstrate the effectiveness of a TDR program. This metric has been used to evaluate numerous TDRs in effect nationwide.

Combining TDR with TOD opens up the possibility of measuring the effectiveness of the TDR program using metrics related to smart growth. One such metric for measuring the value of TDR in combination with TOD is the fiscal impact of Smart Growth. Municipalities benefit because the cost of infrastructure in higher-density areas—especially areas that are already built-out—and the cost of providing services in TOD areas is substantially lower than similar infrastructure investments and services in greenfield developments. These cost advantages can be estimated on a per-unit basis.

Smart growth projects that result from TDR programs can also have positive economic impacts on local businesses within a community's commercial core. The additional residents in the receiving area generated by the TDR will spend a proportion of their income in the receiving area and will add to local activities. These additional expenditures have an economic multiplier effect that can be quantified.

The benefits of TDR can be quantified in terms of the number of vehicle miles of travel (VMT) saved by the development transfer. VMT is a combination of traffic generation, i.e. the number of vehicle trips generated by the various uses, and the average trip lengths. The number of vehicle trips per dwelling unit in a downtown or TOD area may be lower than in a low-density area because of several factors:

- Size of the dwelling units (apartment versus single-family detached home).
- Greater opportunities for shorter trips to be made on foot or by bicycle.
- Better transit service, leading to higher percentages of trips by transit.

The traffic generation rates published by the ITE reflect the differences among different types of dwelling units (single-family homes, townhouses, apartments) but do not fully reflect the influence of transit. As recommended by ITE, the rates need to be adjusted when there is significant transit service. The average lengths of the vehicle trips are also greater in low-density areas compared with higher-density, mixed-use areas. That is because trips to a supermarket, movie theater, or train station are shorter in high-density areas compared with low-density areas. The combination of these two factors can translate into significant VMT savings.

Reduced VMT leads to an additional benefit of TDR, which is reduced greenhouse gas emissions.

Communities that have prioritized sustainability can use TDR in combination with TOD to help achieve the goal of limiting greenhouse gas emissions by reducing their per capita VMT. This benefit also directly relates to energy consumption.

7 Demonstration Projects

This section describes the process of working with demonstration project partners, including the draft Comprehensive Plan amendment that would enable TDR legislation.

Demonstration project partners are asked to submit a brief proposal for inclusion in the TDR Toolbox. The most critical component of the review process is adherence to the demonstration project selection criteria. The criteria were developed to ensure that the process of selecting partners is rigorous and inclusive and produces diverse, relevant, and replicable samples of TDR implementation strategies.

The criteria include:

- Existence of potential sending districts and receiving districts within the municipality
 - Sending districts may include agricultural land, environmentally sensitive areas, historic properties and/or flood zones. Other objectives for protecting land from development will also be considered.
 - Receiving districts should include a transit hub and/or substantial commercial area that could attract pedestrian or alternative transportation traffic to the new development.
- Expression of interest from municipal planning staff and/or planning board
 - Participation by the local planning staff or planning board is integral to the Demonstration Project process, so local staff must express a willingness to participate in the project.
- Active real estate market
 - The objective of the TDR Toolbox is to result in implementation of TDR programs that have the potential to be actively used; therefore, the partner municipalities must have some degree of demand for development in a transit area or downtown.
- Diversity of municipalities
 - Selection of Demonstration Project partners will attempt to ensure diversity of geography and type of sending district.
 - Geographic diversity will include location (i.e., downstate, Hudson Valley, upstate) and neighborhood typology (i.e., urban, suburban, rural).
 - Sending district diversity will ensure that the Toolbox demonstrates TDR programs that preserve land for a variety of land use objectives.

7.1 Lessons Learned

Upon completion of the demonstration projects, this section will be updated to include issues and opportunities that came up through the process of work with the demonstration project partners.

7.2 Challenges and Limitations

Although TDR has the potential to help municipalities achieve a variety of land use objectives, it also presents challenges to implementation that must be addressed on a community level. Some of these challenges may be overcome through well-crafted zoning amendments to establish a TDR program, but TDR may not be an appropriate solution in every municipality. New York State has only 16 examples of TDR programs, which is in part a reflection of the complicated nature of creating a TDR program—a problem that this toolbox hopes to alleviate. Some of the key challenges to implementing TDR programs are outlined below. Additional challenges and limitations will be documented during the development of Demonstration Projects and described in this section.

- Need for administrative capacity and staff resources.
- Need for active real estate market.
- Concerns about density in the receiving district.
- School impacts.
- Complications in creating inter-municipal TDR.

Appendix A

A.1 New York State Legislation

A.1.1 New York State Town Law § 261-a: Transfer of development rights; definitions; conditions; procedures

1. As used in this section:

a. "Development rights" shall mean the rights permitted to a lot, parcel, or area of land under a zoning ordinance or local law respecting permissible use, area, density, bulk or height of improvements executed thereon. Development rights may be calculated and allocated in accordance with such factors as area, floor area, floor area ratios, density, height limitations, or any other criteria that will effectively quantify a value for the development right in a reasonable and uniform manner that will carry out the objectives of this section.

b. "Receiving district" shall mean one or more designated districts or areas of land to which development rights generated from one or more sending districts may be transferred and in which increased development is permitted to occur by reason of such transfer.

c. "Sending district" shall mean one or more designated districts or areas of land in which development rights are designated for use in one or more receiving districts.

d. "Transfer of development rights" shall mean the process by which development rights are transferred from one lot, parcel, or area of land in any sending district to another lot, parcel, or area of land in one or more receiving districts.

2. In addition to existing powers and authorities to regulate by planning or zoning, including authorization to provide for transfer of development rights pursuant to other enabling law, a town board is hereby empowered to provide for transfer of development rights subject to the conditions hereinafter set forth and such other conditions as the town board deems necessary and appropriate that are consistent with the purposes of this section. The purpose of providing for transfer of development rights shall be to protect the natural, scenic or agricultural qualities of open lands, to enhance sites and areas of special character or special historical, cultural, aesthetic or economic interest or value and to enable and encourage flexibility of design and careful management of land in recognition of land as a basic and valuable natural resource. The conditions hereinabove referred to are as follows:

a. That transfer of development rights, and the sending and receiving districts, shall be established in accordance with a comprehensive plan within the meaning of section two hundred sixty-three of this article. The sending district from which transfer of development rights may be authorized shall consist of natural, scenic, recreational, agricultural, forest, or open land or sites of special historical, cultural, aesthetic or economic values sought to be protected. Every receiving district to which transfer of development rights may be authorized, shall have been found by the town board, after evaluating the effects of potential increased development which is possible under the transfer of development rights provisions, to contain adequate resources, environmental quality and public facilities, including adequate transportation, water supply, waste disposal and fire protection, and that there will be no significant environmentally damaging consequences and such increased development is compatible with the development otherwise permitted by the town and by the federal, state, and county agencies having jurisdiction to approve permissible development within the district. A generic environmental impact statement pursuant to the provisions of article eight of the environmental conservation law shall be prepared by the town board for the receiving district before any such district, or any sending district, is designated, and such statement shall be amended from time to time by the town board if there are material changes in circumstances. Where a transfer of development rights affects districts in two or more school, special assessment or tax districts, it may not unreasonably transfer the tax burden between the taxpayers of such districts. The receiving and sending districts need not be coterminous with zoning districts.

b. That sending and receiving districts be designated and mapped with specificity and the procedure for transfer of development rights be specified. Notwithstanding any other provision of law to the contrary, environmental quality review pursuant to article eight of the environmental conservation law for any action in a receiving district that utilizes development rights shall only require information specific to the project and site where the action will occur and shall be limited to review of the environmental impacts of the action, if any, not adequately reviewed in the generic environmental impact statement.

c. That the burden upon land within a sending district from which development rights have been transferred shall be documented by an instrument duly executed by the grantor in the form of a conservation easement, as defined in title three of article forty-nine of the environmental conservation law, which burden upon such land shall be enforceable by the appropriate town in addition to any other person or entity granted enforcement rights by the terms of the instrument. All provisions of law applicable to such conservation easements pursuant to such title shall apply with respect to conservation easements hereunder, except that the town board may adopt standards pertaining to the duration of such easements that are more stringent than such standards promulgated by the department of environmental conservation pursuant to such title. Upon the designation of any sending district, the town board shall adopt regulations establishing uniform minimum standards for instruments creating such easements within the district. No such modification or extinguishment of an

easement shall diminish or impair development rights within any receiving district. Any development right which has been transferred by conservation easement shall be evidenced by a certificate of development right which shall be issued by the town to the transferee in a form suitable for recording in the registry of deeds for the county where the receiving district is situated in the manner of other conveyances of interests in land affecting its title.

d. That within one year after a development right is transferred, the assessed valuation placed on the affected properties for real property tax purposes shall be adjusted to reflect the transfer. A development right which is transferred shall be deemed to be an interest in real property and the rights evidenced thereby shall inure to the benefit of the transferee, and his heirs, successors and assigns.

e. That development rights shall be transferred reflecting the normal market in land, including sales between owners of property in sending and receiving districts, a town may establish a development rights bank or such other account in which development rights may be retained and sold in the best interest of the town. Towns shall be authorized to accept for deposit within the bank gifts, donations, bequests or other development rights. All receipts and proceeds from sales of development rights sold by the town shall be deposited in a special municipal account to be applied against expenditures necessitated by the municipal development rights program.

f. That prior to designation of sending or receiving districts, the legislative body of the town shall evaluate the impact of transfer of development rights upon the potential development of low or moderate income housing lost in sending districts and gained in receiving districts and shall find either there is approximate equivalence between potential low and moderate housing units lost in the sending district and gained in the receiving districts or that the town has or will take reasonable action to compensate for any negative impact upon the availability or potential development of low or moderate income housing caused by the transfer of development rights.

3. The town board adopting or amending procedures for transfer of development rights pursuant to this section shall follow the procedure for adopting and amending its zoning ordinance or local law, as the case may be, including all provisions for notice applicable for changes or amendments to a zoning ordinance or local law. Nothing in this section shall be construed to invalidate any provision for transfer of development rights heretofore or hereafter adopted by any local legislative body.

A.1.2 New York State Village Law § 7-701: Transfer of Development Rights; definitions; conditions; procedures

1. As used in this section:

- a. "Development rights" shall mean the rights permitted to a lot, parcel, or area of land under a zoning law respecting permissible use, area, density, bulk or height of improvements executed thereon. Development rights may be calculated and allocated in accordance with such factors as area, floor area, floor area ratios, density, height limitations, or any other criteria that will effectively quantify a value for the development right in a reasonable and uniform manner that will carry out the objectives of this section.
- b. "Receiving district" shall mean one or more designated districts or areas of land to which development rights generated from one or more sending districts may be transferred and in which increased development is permitted to occur by reason of such transfer.
- c. "Sending district" shall mean one or more designated districts or areas of land in which development rights are designated for use in one or more receiving districts.
- d. "Transfer of development rights" shall mean the process by which development rights are transferred from one lot, parcel, or area of land in any sending district to another lot, parcel, or area of land in one or more receiving districts.

2. In addition to existing powers and authorities to regulate by planning or zoning, including authorization to provide for transfer of development rights pursuant to other enabling law, a board of trustees is hereby empowered to provide for transfer of development rights subject to the conditions hereinafter set forth and such other conditions as a village board of trustees deems necessary and appropriate that are consistent with the purposes of this section. The purpose of providing for transfer of development rights shall be to protect the natural, scenic or agricultural qualities of open lands, to enhance sites and areas of special character or special historical, cultural, aesthetic or economic interest or value and to enable and encourage flexibility of design and careful management of land in recognition of land as a basic and valuable natural resource. The conditions hereinabove referred to are as follows:

- a. That the transfer of development rights, and the sending and receiving districts, shall be established in accordance with a comprehensive master plan within the meaning of section 7-722 of this article. The sending district from which transfer of development rights may be authorized shall consist of natural, scenic, recreational, agricultural or open land or sites of special historical, cultural, aesthetic or economic values sought to be protected. Every receiving district, to which transfer of development rights may be authorized shall have been found by the board of trustees, after evaluating the effects of potential increased development which is possible under the transfer of development rights provisions to contain adequate resources, environmental quality and public facilities, including adequate transportation, water supply, waste disposal and fire protection, and that there will be no significant environmentally damaging consequences and such increased development is compatible with the development otherwise permitted by the village and by the federal, state, and county agencies having jurisdiction to approve permissible development within the

district. A generic environmental impact statement pursuant to the provisions of article eight of the environmental conservation law shall be prepared by the village for the receiving district before any such district, or any sending district, is designated, and such statement shall be amended from time to time by the village, if there are material changes in circumstances. Where a transfer of development rights affects districts in two or more school, special assessment or tax districts, it may not unreasonably transfer the tax burden between the taxpayers of such districts. The receiving and sending districts need not be coterminous with zoning districts.

b. That sending and receiving districts be designated and mapped with specificity and the procedure for transfer of development rights be specified. Notwithstanding any other provision of law to the contrary, environmental quality review pursuant to article eight of the environmental conservation law for any action in a receiving district that utilizes development rights shall only require information specific to the project and site where the action will occur and shall be limited to review of the environmental impacts of the action, if any, not adequately reviewed in the generic environmental impact statement.

c. That the burden upon land within a sending district from which development rights have been transferred shall be documented by an instrument duly executed by the grantor in the form of a conservation easement, as defined in title three of article forty-nine of the environmental conservation law, which burden upon such land shall be enforceable by the appropriate village in addition to any other person or entity granted enforcement rights by the terms of the instrument. All provisions of law applicable to such conservation easements pursuant to such title shall apply with respect to conservation easements hereunder, except that the board of trustees may adopt standards pertaining to the duration of such easements that are more stringent than such standards promulgated by the department of environmental conservation pursuant to such title. Upon the designation of any sending district, the board of trustees shall adopt regulations establishing uniform minimum standards for instruments creating such easements within the district. Any development right which has been transferred by conservation easement shall be evidenced by a certificate of development right which shall be issued by the village to the transferee in a form suitable for recording in the registry of deeds for the county where the receiving district is situated in the manner of other conveyances of interests in land affecting its title.

d. That within one year after a development right is transferred, the assessed valuation placed on the affected properties for real property tax purposes shall be adjusted to reflect the transfer. A development right which is transferred shall be deemed to be an interest in real property and the rights evidenced thereby shall inure to the benefit of the transferee, and his heirs, successors and assigns.

e. That development rights shall be transferred reflecting the normal market in land, including sales between owners of property in sending and receiving districts, a village may establish a development rights bank or such other account in which development rights may be retained and sold in the best interest of the village. Villages shall be authorized to accept for deposit within the bank gifts, donations, bequests or other development rights. All receipts and proceeds from sales of development rights sold by the village shall be deposited in a special municipal account to be applied against expenditures necessitated by the municipal development rights program.

f. That prior to designation of sending or receiving districts, the legislative body of the village shall evaluate the impact of transfer of development rights upon the potential development of low or moderate income housing lost in sending districts and gained in receiving districts and shall find either there is approximate equivalence between potential low and moderate housing units lost in the sending district and gained in the receiving districts or that the village has or will take reasonable action to compensate for any negative impact upon the availability or potential development of low or moderate income housing caused by the transfer of development rights.

3. The board of trustees adopting or amending procedures for transfer of development rights pursuant to this section shall follow the procedure for adopting and amending a local law including all provisions for notice applicable for changes or amendments to a zoning ordinance or local law.

4. Nothing in this section shall be construed to invalidate any provision for transfer of development rights heretofore or hereafter adopted by any local legislative body.

A.1.3 New York State General City Law § 20-f

1. As used in this section:

a. "Development rights" shall mean the rights permitted to a lot, parcel, or area of land under a zoning ordinance or local law respecting permissible use, area, density, bulk or height of improvements executed thereon. Development rights may be calculated and allocated in accordance with such factors as area, floor area, floor area ratios, density, height limitations, or any other criteria that will effectively quantify a value for the development right in a reasonable and uniform manner that will carry out the objectives of this section.

b. "Receiving district" shall mean one or more designated districts or areas of land to which development rights generated from one or more sending districts may be transferred and in which increased development is permitted to occur by reason of such transfer.

c. "Sending district" shall mean one or more designated districts or areas of land in which development rights may be designated for use in one or more receiving districts.

d. "Transfer of development rights" shall mean the process by which development rights are transferred from one lot, parcel, or area of land in any sending district to another lot, parcel or area of land in one or more receiving districts.

2. In addition to existing powers and authorities to regulate by planning or zoning including authorization to provide for transfer of development rights pursuant to other enabling law, the legislative body of any city is hereby empowered to provide for transfer of development rights subject to the conditions hereinafter set forth and such other conditions as the city legislative body deems necessary and appropriate that are consistent with the purposes of this section, except that in cities of over one million any transfer of development rights shall be provided in the zoning ordinance after adoption by the city planning commission and board of estimate. The purpose of providing for transfer of development rights shall be to protect the natural, scenic or agricultural qualities of open lands, to enhance sites and areas of special character or special historical, cultural, aesthetic or economic interest or value and to enable and encourage flexibility of design and careful management of land in recognition of land as a basic and valuable natural resource. The conditions hereinabove referred to are as follows:

a. That transfer of development rights, and the sending and receiving districts, shall be established in accordance with a well-considered plan within the meaning of subdivision twenty-five of section twenty of this article. The sending district from which transfer of development rights may be authorized shall consist of natural, scenic, recreational, agricultural or open land or sites of special historical, cultural, aesthetic or economic values sought to be protected. Every receiving district, to which transfer of development rights may be authorized, shall have been found by the legislative body of the city, after evaluating the effects of potential increased development which is possible under the transfer of development rights provisions, to contain adequate resources, environmental quality and public facilities including adequate transportation, water supply, waste disposal and fire protection, and that there will be no significant environmentally damaging consequences and such increased development is compatible with the development otherwise permitted by the city and by the federal, state, and county agencies having jurisdiction to approve permissible development within the district. A generic environmental impact statement pursuant to the provisions of article eight of the environmental conservation law shall be prepared by the city for the receiving district before any such district, or any sending district, is designated, and such statement shall be amended from time to time by the city if there are material changes in circumstances. Where a transfer of development rights affects districts in two or more school, special assessment or tax districts, it may not unreasonably transfer the tax burden between the taxpayers of such districts. The receiving and sending districts need not be coterminous with zoning districts.

b. That sending and receiving districts be designated and mapped with specificity and the procedure for transfer of development rights be specified. Notwithstanding any other provision of law to the contrary, environmental quality review pursuant to article eight of the environmental conservation law for any action in a receiving district that utilizes development rights shall only require information specific to the project and site where the action will occur and shall be limited to review of the environmental impacts of the action, if any, not adequately reviewed in the generic environmental impact statement.

c. That the burden upon land within a sending district from which development rights have been transferred shall be documented by an instrument duly executed by the grantor in the form of a conservation easement, as defined in title three of article forty-nine of the environmental conservation law, which burden upon such land shall be enforceable by the appropriate city in addition to any other person or entity granted enforcement rights by the terms of the instrument. All provisions of law applicable to such conservation easements pursuant to such title shall apply with respect to conservation easements hereunder, except that the city may adopt standards pertaining to the duration of such easements that are more stringent than such standards promulgated by the department of environmental conservation pursuant to such title. Upon the designation of any sending district, the city shall adopt regulations establishing uniform minimum standards for instruments creating such easements within the district. No such modification or extinguishment of an easement shall diminish or impair development rights within any receiving district. Any development right which has been transferred by a conservation easement shall be evidenced by a certificate of development right which shall be issued by the city to the transferee in a form suitable for recording in the registry of deeds for the county where the receiving district is situated in the manner of other conveyances of interests in land affecting its title.

d. That within one year after a development right is transferred, the assessed valuation placed on the affected properties for real property tax purposes shall be adjusted to reflect the transfer. A development right which is transferred shall be deemed to be an interest in real property and the rights evidenced thereby shall inure to the benefit of the transferee, and his heirs, successors and assigns.

e. That development rights shall be transferred reflecting the normal market in land, including sales between owners of property in sending and receiving districts, a city may establish a development rights bank or such other account in which development rights may be retained and sold in the best interest of the city. Cities shall be authorized to accept for deposit within the bank gifts, donations, bequests or other development rights. All receipts and proceeds from sales of development rights sold by the city shall be deposited in a special municipal account to be applied against expenditures necessitated by the municipal development rights program.

f. That prior to designation of sending or receiving districts, the legislative body of the city shall evaluate the impact of transfer of development rights upon the potential development of low or moderate income housing lost in sending districts and gained in receiving districts and shall find either there is approximate equivalence between potential low and moderate housing units lost in the sending district and gained in the receiving districts or that the city has or will take reasonable action to compensate for any negative impact upon the availability or potential development of low or moderate income housing caused by the transfer of development rights.

3. A legislative body of a city modifying its zoning ordinance or enacting a local law pursuant to this section shall follow the procedure for adopting and amending its zoning ordinance or local laws, as the case may be, including all provisions for notice applicable for changes or amendments to a zoning ordinance, local law or regulation.

4. Nothing in this section shall be construed to invalidate any provision for transfer of development rights heretofore or hereafter adopted by any local legislative body, or, in the case of cities over one million, by the board of estimate.

A.2 Alternatives to TDR

A.2.1 Zoning

As an alternative to implementing a TDR program, communities may opt to simply amend their zoning code in order to restrict certain types and/or densities of development in one area while permitting greater intensity of development in others. If well-considered and consistent with the municipality's comprehensive plan, restrictive zoning can be a relatively feasible strategy to guide development away from conservation areas. Most municipalities are familiar with the process to adopt and administer new zoning regulations.

Although potentially a more simple process than establishing a TDR program, downzoning runs the risk of reducing property values in conservation areas, which may be considered unfair to those property owners. A substantial downzoning that removes economic value from property could be grounds for legal action, so rezoning to protect conservation areas must be done carefully to ensure that property owners are able to realize some economic value for their land. The advantage of TDR over a simple rezoning is that it can provide a mechanism for property owners to realize some economic value and can prevent regulatory takings.

A.2.2 Cluster Development

Cluster development is similar to TDR except that it generally occurs on a single parcel and only involves one property owner. This land use tool allows the property owner to concentrate development on one portion of a site, leaving a larger area of open space on the remainder of the site without altering the total density. This strategy tends to be easier to adopt and administer than TDR because it does not involve transfers between different property owners.

Cluster development is a good solution on sites that have some areas that are more sensitive than others, in communities that value shared open space or to create a balance between preserving agricultural land while also allowing new development. However, it is not effective at transferring density to smart growth areas and does not provide a solution for communities that have conservation areas and development areas that are not within one site.

A.2.3 Purchase of Development Rights (PDR)

Purchase of Development Rights gives property owners in conservation areas the option of selling development rights on their properties in exchange for recording a conservation easement that prevents or limits future development. PDR has some advantages over TDR, most notably that it does not require a second party in a receiving district in order to complete the transaction (this drawback of TDR is mitigated in the Density Transfer Charge option). Instead, the municipality or some other public entity purchases the development rights and retires them, rather than transferring them to another location.

Perhaps the key drawback of PDR is that it does not provide a stream of revenue from a receiving district property owner for the purchase of development rights and therefore requires a special tax, bond, grants or other outside funding source. In addition, because PDR retires development rights, rather than relocating them, there is no potential smart growth benefit.

A.3 Literature Review

The literature on Transfer of Development Rights (TDR) is expansive and detailed. Beginning shortly after zoning code resolutions in the early part of the 20th century that allowed for some form of transferrable rights, researchers have been examining the use of, market for, and legality of TDR programs around the world. More recently, some literature has focused on questions about what factors contribute to a program's success and why TDR programs are not used more widely. These studies, both in New York State and nationally, have raised some common themes to help increase the potential success of TDR programs. Although every municipality faces different challenges, TDR programs appear to be most successful when there is sufficient demand for bonus development in the receiving district coupled with strict development regulations in the sending district. In addition, receiving districts should

be tailored to fit the community's priorities and the carrying capacity of the area that will receive additional development. TDR programs are also most effective when there are few other means by which property owners can achieve bonus development. Simplicity of the program—both in terms of administration by the municipality and utilization by property owners—can help to ensure that it is effective and sustainable.

The literature predominantly falls into three categories: political and planning analysis, economic analysis and legal analysis. For the most part, the market analyses do not provide detail on the legality or political palatability of TDR programs, and the legal analyses do not address the market factors of such a program. Although the political analyses often touch on the economics and legality of TDR programs, these resources better address the policy and planning factors that allow for a TDR program to exist and, if possible, succeed.

This review captures only a small slice of the existing resources, but aims to provide a sample of the literature that will be of use to municipalities exploring a TDR program. Below is an overview of TDR resources grouped by category.

A.3.1 Political Analysis / General Overview

Donnelly, Joe, et al. *Market-Based Land Use Control: An Analysis of the Potential for Transfer of Development Rights Programs in the Capital Region*. 2012. <http://www.saratogaplan.org/www/wp-content/uploads/2015/02/TDRPublication.pdf>.

In 2011-2012, Saratoga PLAN, the Mohawk Hudson Land Conservancy, the University at Albany, and the communities of Bethlehem and Stillwater, NY, collaborated on this analysis of the potential use of TDR and incentive zoning in the state's Capital Region. The purpose of the study is to provide cities, villages and towns in the region with resources to evaluate the use of TDR or incentive zoning programs in their communities. Through an evaluation of academic literature, case studies, and hypothetical programs in two New York communities, the collaborative report finds that TDR and incentive zoning are promising mechanisms for communities to achieve their fiscal, land-use and community-building goals.

The study provides a list of helpful best practice policy and program characteristics that will result in optimized local TDR programs. These are:

- Early and meaningful stakeholder participation in the program design and operation.
- Community education on the real benefits and potential hurdles.
- Use of an independent third party to administer the program.
- Creation of clear rules for participation, use of a transparent market-valuation process and explicit statement of and adherence to a predetermined timeline from application to approval.
- Development of TDR sending and receiving areas that work in concert with the community's existing vision and land-use policies.
- Insurance that any incentive programs advance community goals, meet potential participants' needs, and operate with effective administration and oversight.
- Consideration of project scale (the larger the geographic area for implementation, the better the program outcomes).

These findings were derived from an examination of the academic literature as well as a review of successful TDR programs.

Furman Center. *Buying Sky: The Market for Transferable Development Rights in New York City*. 2013. http://furmancenter.org/files/BuyingSky_PolicyBrief_21OCT2013.pdf.

This report assesses the use of TDRs in New York City, focusing specifically on zoning lot mergers, landmark transfers and special purpose districts. The report goes details the existing market for development rights and looks at how often property owners have transferred rights, where in the City they have transferred those rights, how large the rights have been and how much buyers have paid for the rights. The report concludes by evaluating the policy implications of findings from the market study.

The report's key findings are:

- The level of transfer activity (i.e., how often property owners transfer development rights) ebbs and flows with the real estate market.
- Development rights transfers often occur only in high-density, high-demand areas.
- Most individual development rights transfers in New York City have been relatively small (under 20,000 square feet), but many projects use multiple small transfers in aggregate.
- The average price paid per square foot of transferred development right in the 242 New York City transactions evaluated in this study was \$181, but prices of individual transactions varied from less than \$50 to more than \$500 per square foot.
- The variation in transaction price may be the result of transaction timing, transfer size, legal mechanisms used to enable the transfer and the type of zoning in the receiving districts.

- The City should consider making the TDR market more transparent. Under the current system, it is very difficult to identify and decode the documents that the various stakeholders use in executing a TDR agreement.
- The landmark transfer program is too cumbersome to be beneficial.
- Specific findings about the density incentives and owner-contributed costs to a District Improvement Fund in the proposed East Midtown rezoning.

Linkous, Evangeline, and Timothy Chapin. *TDR Program Performance In Florida*. Journal Of The American Planning Association 80.3 (2014): 253-267.

In this state-specific review of TDR programs, the authors identify the types of TDR approaches used in Florida, and evaluate which approaches help communities manage growth. The article identifies three types of TDR programs in Florida: a traditional approach, a hybrid approach and a rural TDR approach. The authors find that Florida's programs do not effectively manage growth, and that acres conserved is not a good measure of program success.

Florida's Experience with TDRs:

Over the last 50 years, Florida has experienced significant growth that has spawned a statewide growth management policy that encourages smart growth development, increased urban density and protection of environmental resources. Despite this emphasis, only 20 of 67 counties have frameworks in place to facilitate transfer of development rights. In these 20 counties, there are 31 different TDR programs, only 17 of which report transaction activity.

The authors group the state's 31 programs into three categories: conventional TDR (rural-to-urban TDR that protects sensitive land and promotes urban growth), hybrid TDR (conventional TDR with expanded receiving areas on the urban fringe or in rural locations) and rural TDR (in which rural development is the central goal). The conventional programs show little transfer activity, which the authors attribute to a lack of land-use and planning policies that facilitate market demand for higher density in receiving areas. The hybrid approach also shows little activity, but may have more promise in the long-term. Finally, the rural TDR programs show some success in conserving land, but encourage sprawl and do not foster efficient or predictable development patterns.

The authors find that the mixed outcomes across the varied conventional, hybrid, and rural TDR programs “do little to help communities manage growth”. They present two key takeaways from Florida’s experience:

- The TDR programs need to operate within the “local comprehensive planning paradigm” to avoid the undesirable growth patterns caused by the hybrid and rural TDR approaches, and to encourage urban densification fostered by the conventional TDR approach.
- The acres conserved measure of performance may hide the undesirable growth patterns that result from hybrid and rural TDR approaches, and thus encourage their further use despite ill effects on growth management.

Nelson, Arthur C., Pruetz, Rick, and Woodruff, Douglas. *TDR Handbook: Designing and Implementing Successful Transfer of Development Rights Programs*. Washington DC, USA: Island Press, 2011.

The TDR Handbook is the most comprehensive recent review of TDR in the United States. As noted in the book’s Foreword, the Handbook was written so that users can “jump in at any chapter and find just what you need – theory, economics, planning, the law, a model ordinance, and some interesting case studies of TDR”. The Handbook begins with a historical and political context for TDRs. The remainder is divided into four parts: Part 1 describes the economic and policy foundations of TDRs; Part 2 reviews the relationship between TDR and planning; Part 3 dives into legal issues and administrative concerns surrounding TDRs; and Part 4 provides a comprehensive overview of this country’s TDR programs and their function. Finally, the epilogue looks at the future of TDRs. The Handbook also contains three appendices that may be of use to municipalities interested in implementing a TDR program: a model TDR ordinance, sample TDR program forms, and a state-by-state TDR program listing.

New York City Department of City Planning. *A Survey of Transferable Development Rights Mechanisms in New York City*. <http://www.nyc.gov/html/dcp/pdf/tldr/research.pdf>.

This comprehensive resource about the use of TDRs in New York City presents the history and function of various TDR mechanisms over time. Specifically, the report focuses on zoning lot mergers, which have existed since the City’s 1916 Zoning Resolution and are the precursor to some of the more recent TDR programs, landmark transfers, special district transfers and large-scale development plans. The report provides a list of the projects that use each of the mechanisms, and includes detailed examples of the mechanisms in use. Finally, the report includes brief case studies of other U.S. cities utilizing TDRs.

Pelletier, Mike, Rick Pruetz, and Christopher Duerksen. TDR-Less TDR Revisited: Transfer of Development Rights Innovations and Gunnison County's Residential Density Transfer Program. American Planning Association. May/June 2010.

This article provides a look at non-traditional TDR use, focusing specifically on Gunnison County, Colorado's residential density transfer program. The authors discuss how TDR innovations such as alternative credit allocation and the use of Density Transfer Charges can alleviate challenges with the traditional programs.

Under a Density Transfer Charge, developers are typically allowed to exceed the maximum allowed density in a specified receiving district by either agreeing to preserve land or paying a fee to the town, although some programs only allow for a cash payment. The article describes an innovation to the Density Transfer Charge programs in which developers are allowed additional development by purchasing easements on sending-area land equal in value to a predetermined percentage of the property value increase resulting from the additional development approved through the TDR process. The article reviews how Gunnison County used a similar approach and reviews the advantages and disadvantages of that program. Finally, the article provides guidance to other communities considering non-traditional TDR approaches.

Pizor, Peter J. *A Review Of Transfer Of Development Rights*. Appraisal Journal 46.3 (1978): 386.

This essay, written approximately 20 years after the earliest TDR literature was published, is one of the first to use sample TDR programs to discuss the legal framework and various types of potential TDR programs. Prior to the late 1970s, much of the work surrounding TDRs was theoretical and academic. However, this paper was written at the cusp of the "second generation" of TDRs, which involved an exploration of existing programs implemented as a public policy mechanism.

Pruetz, Rick, and Noah Standridge. *What Makes Transfer Of Development Rights Work?: Success Factors From Research And Practice*. Journal Of The American Planning Association 75.1 (2009): 78-87.

This article evaluates the factors of a TDR program that contribute to its success. Using land area preserved as the measurement of success, the authors identify the top ten success factors referenced in existing literature and evaluate how many of these factors are present in the country's most successful TDR programs:

- Demand for bonus development
- Receiving areas customized to the community
- Strict sending-area development regulations
- Few or no alternatives to TDR for achieving additional development
- Market incentives: transfer ratios and conversion factors
- Ensuring That developers will be able to use TDR
- Strong public support for preservation
- Simplicity
- TDR promotion and facilitation
- A TDR bank

Suffolk County Department of Economic Development & Planning. *Suffolk County Transfer of Development Rights (TDR) Study: Task N1 – Inventory of Existing Programs*. March 2014.
http://www.suffolkcountynv.gov/Portals/0/planning/Publications/HUD_TASKN1_ALL03032014r.pdf.

This two-part study on the local, county and regional TDR programs in Suffolk County was developed by the New York-Connecticut Sustainable Communities Consortium through a U.S. Department of Housing and Urban Development Sustainable Communities Regional Planning Grant in 2011.

In the first of this two-part study, this report provides an overview of TDR and a detailed inventory of the existing programs in Suffolk County. This assessment includes a summary of the existing municipal TDR programs in the county, a review of their zoning codes and an analysis of the proposed intent of the programs and the identification of their sending and receiving areas.

Suffolk County Department of Economic Development & Planning. *Suffolk County Transfer of Development Rights (TDR) Study: Tasks N2, N3, N4 – Analysis of Existing Programs, Recommendations, and Public Outreach*. May 2014.
http://www.suffolkcountynv.gov/Portals/0/planning/HUD/HUD_SCTDR%20StudyTaskN2_06022014.pdf.

The second part of the Suffolk County TDR study, also funded through a grant from the U.S. Department of Housing and Urban Development, is intended to provide recommendations to the communities in that region of the state. While the report does include a brief review of other TDR programs throughout the country, the bulk of the report builds off the first part of the study referenced above and looks closely at the region's existing programs. Based on the extensive review of existing programs, the report identifies a list of lessons learned, challenges, and recommendations for future and existing programs.

Stone, Jeremy, et al. *Breaking Ground: Planning and Building in Priority Growth Districts – A Guide for Local Leaders*. Yale School of Forestry and Environmental Studies and Land Use Law Center, Pace University Law School. October 2005. <http://environment.yale.edu/publication-series/documents/downloads/o-u/PriorityGrowthDistricts.pdf>.

This report describes the use of Priority Growth Districts (PGDs) as a method for directing development to specific locations and encouraging development design that is attractive to the community's residents. In describing PGDs, the report explains how to develop a growth district as a component of the comprehensive plan, including techniques and mechanisms for implementation. Incentive zoning, TDRs, cluster development, and waiver provision are described in detail as useful methods for encouraging growth in a priority district. The report also includes case study projects from three towns in Orange County, NY and several out-of-state examples.

New York State Case Studies:

- *Four Corners Residential Development in East Fishkill, New York*. The Four Corners project was designed as a multi-use traditional neighborhood development with 261 residential units and 10,000 square feet of office space on 478 acres of land. The neighborhood is built on just 168 of the available 478 acres, preserving nearly 65 percent of the land as open space. Residents of Four Corners are within walking distance of daily necessities, neighbors, and community resources.
- *Town Center in Lagrange, New York*. The Town created two new zoning districts and a "Town Center" concept to "create walkable, highly integrated, multifunctional public and private spaces, through a network of connected streets, sidewalks, and uses". This project and the zoning code changes that enable its development had significant support from champions within the local government.
- *Warwick Grove in Warwick, New York*. Warwick Grove is a walkable, traditional neighborhood development with 215 residential units and 100 acres of open space. In 1997, the Village held a design charrette with local residents, and that exercise provided the basis for Warwick Grove's design. Significant public involvement and excitement was a critical element in this project's success.

This resource is more of a guidance document than an academic study. There are no conclusions or recommendations drawn from the case studies that could be applied to other projects or programs. Instead, the case studies provide detailed accounts of successful instances of PGD use.

Transfer of Development Rights. James A. Coon Local Government Technical Series. 2011.

http://www.dos.ny.gov/lg/publications/Transfer_of_Development_Rights.pdf.

This New York State report provides an overview of TDR and presents benefits and drawbacks. Most importantly, though, it gives a history of the case law that provided a legal basis for TDR prior to 1989 and a description of the State's legislative actions that authorize the creation of TDR programs throughout New York. The report breaks down the enabling legislation into its various components and provides detailed descriptions of each section: purposes of allowing TDR, definition of development rights, designation of sending districts and receiving districts, an overview of conservation easements and land in the receiving districts, variations in the types of TDR programs, development rights banks and procedures for implementing a program.

A.3.2 Economic Analysis

Kopits, Elizabeth, Virginia McConnell, and Margaret Walls. *Making Markets for Development Rights Work: What Determines Demand?* October 2005. <http://www.rff.org/documents/RFF-DP-05-45.pdf>

In this article, the authors argue that many TDR programs are unsuccessful because of inactive TDR markets that are the result of minimal demand from developers to purchase the transferrable rights. The authors develop a theoretical model of what determines a developer's demand for transferred development rights, focusing specifically on Calvert County, Maryland's longstanding TDR program. The article finds that the relationship of the baseline zoning density to the desired density has a large effect on a developer's demand for TDRs, as does the availability of sufficient sewer capacity and the type of land use surrounding a new subdivision eligible for TDR use.

Thorsnes, Paul. Letting the Market Preserve Land: The Case For A Market-Driven Transfer Of Development Rights Program. *Contemporary Economic Policy* 17.2 (1999): 256.

In this economic look at TDRs, Thorsnes evaluates the market factors that drive the success or failure of a program. In his evaluation, he finds that traditional zoning-based TDRs carry undue administrative burden, are unlikely to allocate land efficiently and incentivize private parties to act strategically against the common good. He argues that a more successful approach would be a marketable development rights (MDR) program in which a municipality “define[s] and equitably allocate[s] the rights to develop an agreed-upon proportion of land within a jurisdiction, and let[s] the market allocate those rights among landowners”. This alternative has the potential to reduce administrative costs, disincentivize private strategic behavior, and address the market failure that is common in traditional TDR programs.

Walls, Margaret. *Markets for Development Rights: Lessons Learned from Three Decades of a TDR Program*. December 2012. <http://www.rff.org/RFF/Documents/RFF-DP-12-49.pdf>.

This discussion paper summarizes the somewhat limited economics literature on TDRs. The author finds that the existing literature and theoretical models signal that TDRs are preferable to uniform zoning density limits, but that TDRs may be best used alongside density limits under certain circumstances. The author then describes and evaluates the results of the longstanding Calvert County, Maryland TDR program, and provides lessons learned for other existing and potential TDR programs. She concludes by noting the factors that have created problems in the Calvert program and recommends further exploration of economic models for better data.

A.3.3 Legal Analysis

Been, Vicki, and John Infranca. *Transferable Development Rights Programs: “Post-Zoning?”* Brooklyn Law Review 78.2 (2013): 435-465.

This article explores the relatively recent special transfer district TDR programs in New York City and evaluates their benefits over older, more traditional zoning programs. The author looks specifically at the Theater Subdistrict, the Special West Chelsea District, the Special Hudson Yards District and the Proposed East Midtown Rezoning. She finds that while these new special transfer district programs “may be too rigid and complex to qualify as flexible post zoning,” the “more rigid regulation of eligible receiving sites may provide advantages” and the “newer TDR programs have the potential to render TDRs more valuable”.

Pruetz, Rick, and Erica Pruetz. *Transfer of Development Rights Turns 40*. Planning & Environmental Law 59.6 (2007): 3-11.

This article explores how TDR works, what contributes to a program's success, how the mechanism is changing over time and how the courts have assessed TDR as it has evolved. The authors write that at the publication of the article in 2007, there were more than 100 reported court decisions involving TDR. The article provides a description of several case law examples, some of which resulted in a ruling in favor of TDRs, others of which did not. The article also references the two Supreme Court cases involving TDR: Penn Central Transportation Co. v. New York City, in which the Court ruled that TDRs were sufficient compensation for the development restrictions at Grand Central Terminal; and Suitum v. Tahoe Regional Planning Agency, in which the Supreme Court ruled that the planning agency had not provided sufficient relief from the taking of development rights.

Stevenson, Sarah J. *Banking On TDRs: The Government's Role As Banker Of Transferable Development Rights*. New York University Law Review 73.(1998): 1329.

<http://www.nyulawreview.org/sites/default/files/pdf/NYULawReview-73-4-Stevenson.pdf>.

This review evaluates whether government-run TDR banks can enable failing programs to be successful. The author gives a history of TDR programs and the subsequent need for and creation of TDR banks. She then describes four existing programs that successfully use a TDR bank, each in its own way: New York's South Street Seaport Historic District, the New Jersey Pinelands, Seattle's Downtown Transferrable Development Rights Program and Montgomery County's Farmland Preservation Program. Finally, the author identifies some of the legal and financial challenges that TDR banks are likely to encounter, and provides recommendations for municipalities to overcome those issues.

The key challenges identified include:

- Strategic Zoning
- Antitrust Challenges
- Authority Challenges
- Legitimate Public Purpose
- Municipal Revenue Problems
- Valuation

Stinson, Joseph. *Transferring Development Rights: Purpose, Problems, and Prospects in New York*. Pace Law Review, Vol. 17, Issue 1 (Fall/Winter 1996), pp. 319-358

<http://digitalcommons.pace.edu/cgi/viewcontent.cgi?article=1322&context=plr>

This article analyzes the benefits and drawbacks of TDR as a tool for zoning in New York. The author looks specifically at the evolution of TDR, including the State's 1989 codification of TDR for use in New York's towns. The article also suggests criteria necessary for a successful TDR program.

Stinson acknowledges that TDR is "an intricate and complex tool that requires very specific conditions in order for it to function adequately". Specifically, the public must have confidence in the value of TDR credits. This can be fostered by:

- Having a market-based system of valuation.
- Ensuring that the designated receiving districts must have the capacity to absorb the credits generated in the sending district.
- Ensuring that the designated receiving districts must be close enough to the designated sending districts that the value of preservation created through transferred development rights in the sending district can also be experienced by residents and developers in the receiving district.
- Having a stable program accompanied by stable zoning regulations that are not subject to change as the result of lawsuits or political will.
- Ensuring that developers do not manipulate credits to their advantage.

This report does not provide conclusions on successes or challenges. Rather, it provides a legal basis for the use of a coastal TDR program that would avoid a takings lawsuit.

Williams, Nicholas R. Coastal TDRs and Takings In A Changing Climate. *Urban Lawyer* 46.1 (2014): 139-172.

In this article, the author makes the case for TDR use as a method for mitigating the impact of climate change on coastal zones. Specifically, he evaluates how municipalities can use TDRs to restrict development in areas that are subject to coastal flooding, erosion, and other damage while avoiding an unconstitutional taking of rights. He cites the seven examples provided in Nelson et al.'s TDR Handbook but, as described in the Coastal Floodzone Case Studies in section A.4.14 below, only one or two of these programs is truly set up to successfully transfer development out of coastal zones to mitigate the impacts of climate change.

A.4 Example TDRs in Practice

A.4.1 New York State Case Studies⁷

New York State has a long history of effective TDR programs, most notably in New York City and in the Long Island Pine Barrens. The TDR Handbook includes a list of municipal programs by state, and shows that in 2011 there were 16 programs in New York. However, a search of the towns identified in the TDR Handbook reveals that some have removed code that allows for TDRs while others have updated their comprehensive plans to remove language that encourages TDRs.

For example, in 2014 the Town of Lysander announced the development of a new Comprehensive Land Use Plan, thus replacing the previous plan last updated in 1991.⁸ In a November 2014 article, the plan's committee chairman described the elements of the new plan, including replacement of the 2007 TDR program that he said was "non-functional."⁹ The Plan replaces the program with two incentive zoning options, one of which allows developers to build higher-density developments in exchange for expanding the sewer system. The other option recommends the creation of a new agricultural district and provides tax benefits and high-density development benefits in return for preservation of these districts.

Nevertheless, some of the state's programs have successfully incentivized high-density development in designated receiving areas and preservation of open spaces or historic resources in designated sending areas. The various TDR mechanisms in New York City, as well as their benefits and downfalls, have been well documented over time.¹⁰ Similarly, the Long Island Pine Barrens multi-municipal program has been written about extensively and has its own website.¹¹ This program is described in more detail below.

⁷ Some of the information collected for this section comes from smartpreservation.net, which is a resource that reports on smart preservation efforts and is edited by Rick Pruetz along with other planners, journalists, elected officials, and preservation experts.

⁸ Casey, Ashley. Lysander to Present New Land Use Plan Nov. 13. Baldwinsville Messenger. 4 Nov 2014. <http://www.baldwinsvillemessenger.com/news/2014/nov/04/lysander-present-new-land-use-plan-nov-13/?page=2&>.

⁹ Ibid

¹⁰ One excellent resource is the recent New York City Planning Survey of TDR Mechanisms in New York City, accessible here: <http://www.nyc.gov/html/dcp/html/tldr/tldr-1.shtml>.

¹¹ Pine Barrens Credit Program Homepage: http://www.pb.state.ny.us/chart_pbc_main_page.htm

While the Town of Lysander lies on one end of the TDR program spectrum and New York City and the Long Island Pine Barrens lie on the other end, the remaining programs sit somewhere in the middle. That is, they have seen varying degrees of institutionalization and success. Below is a brief overview of the remaining 13 New York State programs identified in the TDR Handbook.

A.4.2 Brookhaven Township¹²

Despite its listing in the TDR Handbook and an effort to establish its own TDR program, the Town of Brookhaven does not have a municipal program in place. Instead, the Town uses the Long Island Central Pine Barrens Program established through New York State Law.

The Central Pine Barrens Joint Planning & Policy Commission, established through the 1993 Long Island Pine Barrens Protection Act, oversees and administers the multi-municipal TDR program. At the passage of the 1993 law, New York State designated more than 100,000 acres of land as a preservation area known as the Central Pine Barrens.¹³ The 1995 Central Pine Barrens Comprehensive Land Use Plan established the Pine Barrens Credit Program, which designated sending and receiving areas, business procedures, tracking requirements, credit allocations and other details. Development credits are provided to landowners in the conservation area who apply for the program, and allocation is done on a case-by-case basis.¹⁴

While the TDR bank created through the Land Use Plan allocates credits and the market drives the value, each of the three municipalities has their own regulations on how and where credits can be used. Brookhaven's zoning code requires that any increase in development density above the baseline use a Pine Barrens Credit, and specifies that credit redemption allows for a 20 percent increase in the total number of units per density.¹⁵

¹² Information for Brookhaven collected through a review of the Pine Barrens Program, Town Code, and interview with planning staff at the Town of Brookhaven.

¹³ Pine Barrens Credit Program Fact Sheet: http://pb.state.ny.us/general/cpb_fact_sheet.pdf.

¹⁴ Pine Barrens Credit Program Handbook: http://pb.state.ny.us/pbc/pbc_handbook.pdf.

¹⁵ Brookhaven Town Code: Chapter 85, Article XV: Multifamily Residential Districts, Section 280: Density. <http://ecode360.com/8597613>

A.4.3 Clifton Park

In 2005, the Town of Clifton Park adopted an Open Space Incentive Zoning tool that allows developers to request additional density for their parcels in Western Clifton Park in exchange for preserving open space. Developers can do so either by acquiring land or development rights on land that they turn over to the Town for permanent protection or by paying the Town a fee per each additional unit of density requested, which the Town in turn uses to purchase land or rights for permanent protection.¹⁶ At least one developer has requested to build additional single-family residential units in exchange for a cash payment to Clifton Park.¹⁷

A.4.4 Eden

The TDR program in Eden dates back to zoning code adopted in 1977 to preserve rural land use in conservation and agricultural areas. The code allowed for owners in the preservation zones to transfer their development rights to developers in three residential receiving districts. A 1990 update to the zoning code required that developers attain one transferred development right for each residential unit built. However, because the requirement allowed no alternative to the (potentially impossible) acquisition of TDRs, the Town reverted to a voluntary system in 1995. In the years since, the program has been used very few times, in part because there is little development pressure and low demand for high-density properties.¹⁸

A.4.5 Goshen

As in Lysander, the Town of Goshen has eliminated TDR from its zoning code and comprehensive plan. According to the 2008 comprehensive plan update, “the Town of Goshen does not contain many easily identifiable receiving areas of land,” and “TDR is not necessary as a tool to incentivize cluster development” in Goshen.¹⁹

¹⁶ Town of Clifton Park Comprehensive Plan: <http://www.cliftonpark.org/wp-content/uploads/2014/06/Town-of-Clifton-Park-Comprehensive-Plan-2006-Update-1372708971.pdf>.

¹⁷ Smartpreservation.net: <http://smartpreservation.net/clifton-park-new-york/>.

¹⁸ Smartpreservation.net: <http://smartpreservation.net/eden-new-york/>.

¹⁹ Town of Goshen 2008 Comprehensive Plan Updates and Associated Zoning and Town Code Amendments: <http://www.townofgoshen.org/pbminutes/minutes/Goshen%20Draft%20GEIS%20July%202008.pdf>.

A.4.6 Huntington²⁰

The Town of Huntington has had a TDR program as part of its zoning code since 1991. However, TDR is not included in the current Comprehensive Plan, nor was it in the previous plan. Just one instance of TDR use has been recorded to date in the Town of Huntington for use in the building of a house of worship in the Melville Corridor. In this case, a developer requested to build on what the Town considered to be park property. To encourage development away from the park, the Town allowed the developer to construct the house of worship on a larger parcel in an area zoned for industrial use.

According to the Town, there is little demand for transferrable development rights because there is very limited space from which to transfer rights. When and if Huntington needs to preserve open space, there is an existing environmental bond act that allows the Town to purchase land and place it into the parks system.

A.4.7 Perinton

The Town of Perinton adheres to New York State's incentive zoning town law to allow for an open space preservation program that utilizes TDR.²¹ As written, the law applies only to open space for conservation or recreation, rather than open space for farmland. The TDR program has a one-to-one ratio, meaning that the increased development allowed in the receiving site may not exceed the development transferred from the sending site.²² In 1993, after the State passed Town Law 261-b giving towns the ability to use TDR, Perinton approved the transfer of rights on a 56-acre parcel of land that is now zoned as recreational open space. As of the early 2000s, no other TDRs had been used in the town.²³

²⁰ Information about Huntington collected through a review of the town code and an interview with planning staff at the Town of Huntington.

²¹ Town of Perinton 2011 Draft Agricultural and Farmland Protection Plan: http://www.perinton.org/Data/Documents/building/ag_farmland_protection_plan_120511.pdf (page 29).

²² Smartpreservation.net: <http://smartpreservation.net/perinton-new-york/>.

²³ Ibid.

A.4.8 Pittsford²⁴

The Town of Pittsford has a unique TDR program whose creation relied heavily on the public's input, buy-in and approval. In the 1970s and early 1980s amid a growing development boom in Pittsford, the Town recognized the importance of preserving its character, which included the existence of open space. In 1996, the Town created a 50/50 zoning code that required that 50 percent of purchased land for development must be preserved as open space. Despite this controversial code, creating significant amounts of open space, the parcels weren't large enough to be farmed or utilized in any meaningful way, and development continued to grow.

Realizing that the 50/50 code was not preserving an adequate amount of land, the Town established the Greenprint as part of its 1994 Comprehensive Plan. Greenprint includes an inventory of all the land in Pittsford identified by the community as being important to the character of the Town, ranked from highest to lowest. This includes large parcels of farmland, viewsheds, wetland areas and old growth woods. While Greenprint and the resource inventory established a plan of intended preservation areas, it did not prevent development in those areas. Nevertheless, because of strong public buy-in and a committed planning board, development has only occurred once on a parcel that was ranked highly as an area for preservation in Greenprint.

Much of the program's success hinged on one developer who purchased over 300 acres of land both in areas ranked as highly important for preservation and land that did not receive high rankings. The developer then agreed to preserve the most highly ranked land, even moving homes and lots out of those parcels, and built in areas targeted for higher-density growth. Although the plan does not allow for higher than baseline density in the receiving areas, the developer received a competitive advantage over other development groups by purchasing a large amount of land, and entered into a contract for development 20 years ago that is still being built out in 2015.

²⁴ Information on the Town of Pittsford was collected through a review of existing resources and an interview with planning staff at the Town of Pittsford.

In Pittsford there was no one key factor to the success of the program, and much of the preserved land that came out of the program was the result of one developer's commitment to the plan. However, public buy-in and involvement in identifying parcels for recommended preservation, and the existence of a confident planning board that fought for those highly ranked preservation areas was a key component of the program's success.

A.4.9 Riverhead

Like the Town of Brookhaven, Riverhead was written into the Long Island Pine Barrens Act, enabling it to require developers to use credits from the Central Pine Barrens. Unlike in Brookhaven, however, in Riverhead credits are only used for increases in sanitary flow.

The Town of Riverhead also has its own TDR program, which allows for the transfer of credits from an Agricultural Protection Zone to commercial areas. Unlike credits from the Central Pine Barrens, credits from the Agricultural Protection Zone can be used to exceed baseline density zoning. Under this program, 1 acre of agricultural land corresponds to one agricultural preservation credit. To date, four projects have utilized the agricultural preservation credits to increase density in commercial development areas.²⁵

A.4.10 Smithtown

The Town of Smithtown has a Transfer of Density Flow Rights program that encourages flow rights to be transferred from open spaces to historic downtowns. There are four intended purposes of the program: preserve open space and sensitive land, protect groundwater, preserve and enhance the Town's historic districts and create affordable housing units.²⁶ To date, one transfer of density flow rights transaction has taken place, preserving an undeveloped 1.6-acre parcel.

²⁵ Suffolk County TDR Study Inventory (page 8)

²⁶ Suffolk County TDR Study Inventory (page 8)

A.4.11 Southampton

Along with Brookhaven and Riverhead, Southampton is the third town written into the Long Island Pine Barrens Act. In addition to being able to transfer credits from the Central Pine Barrens, the Town also has its own TDR program that allows for credits to be transferred from an aquifer protection overlay district, an agricultural overlay district and the tidal wetlands and ocean beach overlay district.²⁷ The purpose of the programs is to encourage compact and orderly development; preserve open spaces, natural resources, historic resources, and farms; and provide for various housing choices.²⁸

The Town also has a unique TDR program designed to avert diminished drinking water quality, disorderly town growth and disrupted community character that would have resulted from developing land according to 300 Old Filed Maps filed with the county clerk in 1931.²⁹ The maps did not adhere to modern subdivision, recording and marketing practices, and many of the parcels outlined in the maps were smaller than the minimum required lot size in their zoning district. The TDR program, signed into law in 1979, provides landowners in the old filed maps lots with a partial development right that can be transferred to other lots within the old filed map overlay.

A.4.12 Warwick

As a result of the Town's 1999 comprehensive planning process, Warwick made a commitment to the preservation of open space and agricultural lands. Since adoption of the plan, Warwick has amended the Town code to allow for incentive zoning (2002), established a purchase of development rights program (2000), created a community preservation fund supported by a real estate transfer tax (2005), and developed a community preservation project plan (2005) to adopt and implement the fund and build on the 1999 comprehensive plan and 2002 zoning changes.³⁰

²⁷ Suffolk County TDR Study Inventory (pages 8-9)

²⁸ Town of Southampton TDR Program: <http://www.southamptontownny.gov/354/Transfer-of-Development-Rights>.

²⁹ Town of Southampton Old Filed Maps TDR program: <http://www.southamptontownny.gov/359/Old-Filed-Maps>.

³⁰ Town of Warwick 2006 Community Preservation Project Plan:
http://www.townofwarwick.org/agriculture/cppdocs/community_preservation_plan.pdf.

As described in the community preservation project plan, the TDR program specifically allows for the transfer of development rights from the Agricultural Protection Overlay District to the Traditional Neighborhood Overlay District, and requires direct coordination between the seller and the buyer. The Town's incentive zoning program allows developers to have density increases in the Traditional Neighborhood Overlay District in exchange for a cash payment to the town that is then used to purchase development rights from farmers. Transfer of Development Rights is highlighted in the plan as a preferred tool for preservation along with conservation easements, PDR, fee simple acquisition and private conservation.³¹

A.4.13 Other Suffolk County Programs

The Suffolk County TDR Study shows that in addition to the five Suffolk County towns identified in the TDR Handbook, there are also TDR programs in four other towns: East Hampton, Islip, Shelter Island and Southold. A summary of these programs is provided on pages 6-9 of the Suffolk County TDR Inventory.

A.4.14 Coastal Floodzone Case Studies

The TDR Handbook provides the most comprehensive list of existing TDR programs in the United States.³² Of the 239 communities identified in the Handbook, seven use TDR for coastal preservation. One example is Brevard County, located on Florida's Atlantic Coast, which downzoned coastal areas three times between 1979 and 1988, reducing density limits on some properties from 30 units per acre to one unit per acre.³³ To mitigate reduced property values for landowners, the County added TDR components to the zoning code in 1979 that allow transfers between properties under the same ownership or between sending and receiving districts under separate ownership. As of 2005, the County had only approved one transfer from a wetland tract.

³¹ Ibid.

³² The TDR Handbook acknowledges that although the research undertaken to collect information on how many and which communities have TDR programs was thorough, it "undoubtedly did not uncover all existing programs" (131). Additionally, the Handbook was published in 2011, so the list of TDR programs may not be entirely up-to-date. However, it still remains the most comprehensive catalogue of existing programs.

³³ Smartpreservation.net: <http://smartpreservation.net/brevard-county-florida/>.

In another example, the City of Hollywood, Florida downzoned a strip of beachfront land called North Beach from 25 units per acre to seven units per acre, in response to concerns about potential overdevelopment and the subsequent destruction of coastal vegetation. Concurrently, the City began allowing property owners in the downzoned areas to transfer development rights to an area zoned for multi-family housing at a higher density just to the west. The zoning code allowing for the transfers has been amended eight times since its adoption in 1994. Despite a 1983 legal challenge to the downzoning, the Appeals Court ruled in favor of the City, continuing the allowance of downzoning and transferrable development rights.³⁴

Of the other programs identified in the TDR Handbook, only St. Petersburg, Florida also has a robust TDR program that allows landowners in designated preservation sites to sell or trade development rights.³⁵ The remaining four programs, which are located in Florida, California and Oregon, either do not encourage development away from coastal zones, or are not robust enough to have any examples in practice.

Despite lacking evidence of TDR programs that exist to mitigate climate change impacts on coastal communities, at least one study discusses the value of using TDRs for climate change adaptation in coastal areas (Williams 2014). The author argues that TDRs can facilitate “strategic retreat” from coastal zones, thus enabling coastal municipalities to restrict development in areas at risk of flooding, erosion, or submersion while avoiding unconstitutional regulatory takings.³⁶

³⁴ Smartpreservation.net: <http://smartpreservation.net/hollywood-florida/>.

³⁵ Smartpreservation.net: <http://smartpreservation.net/st-petersburg-florida/>.

³⁶ Williams, Nicholas R. "Coastal Tdrs And Takings In A Changing Climate." *Urban Lawyer* 46.1 (2014): 139-172. Legal Source. Web. 26 May 2015.

