

**BOARD OF SUPERVISORS WORK SESSION**  
**GOVERNMENT CENTER BOARD ROOM**  
**OCTOBER 25, 2011 - 4:00 P.M.**

**A. Call to Order**

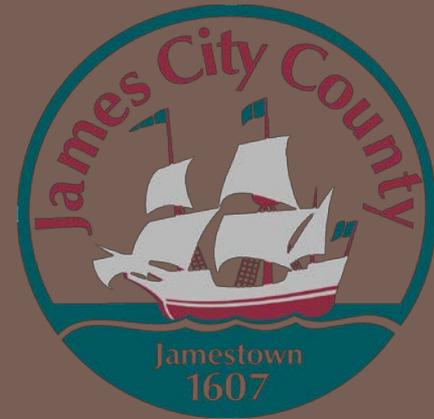
**B. Roll Call**

**C. Board Discussions**

1. **Legislative Agenda**

2. **Transfer of Development Rights (TDR) Feasibility Study: Market Analysis and Final Recommendations (Memorandum) (Summary) (Presentation 1) (Presentation 2) (Attachment 1) (Attachment 2) (Attachment 3) (Attachment 4)**

**D. Break**

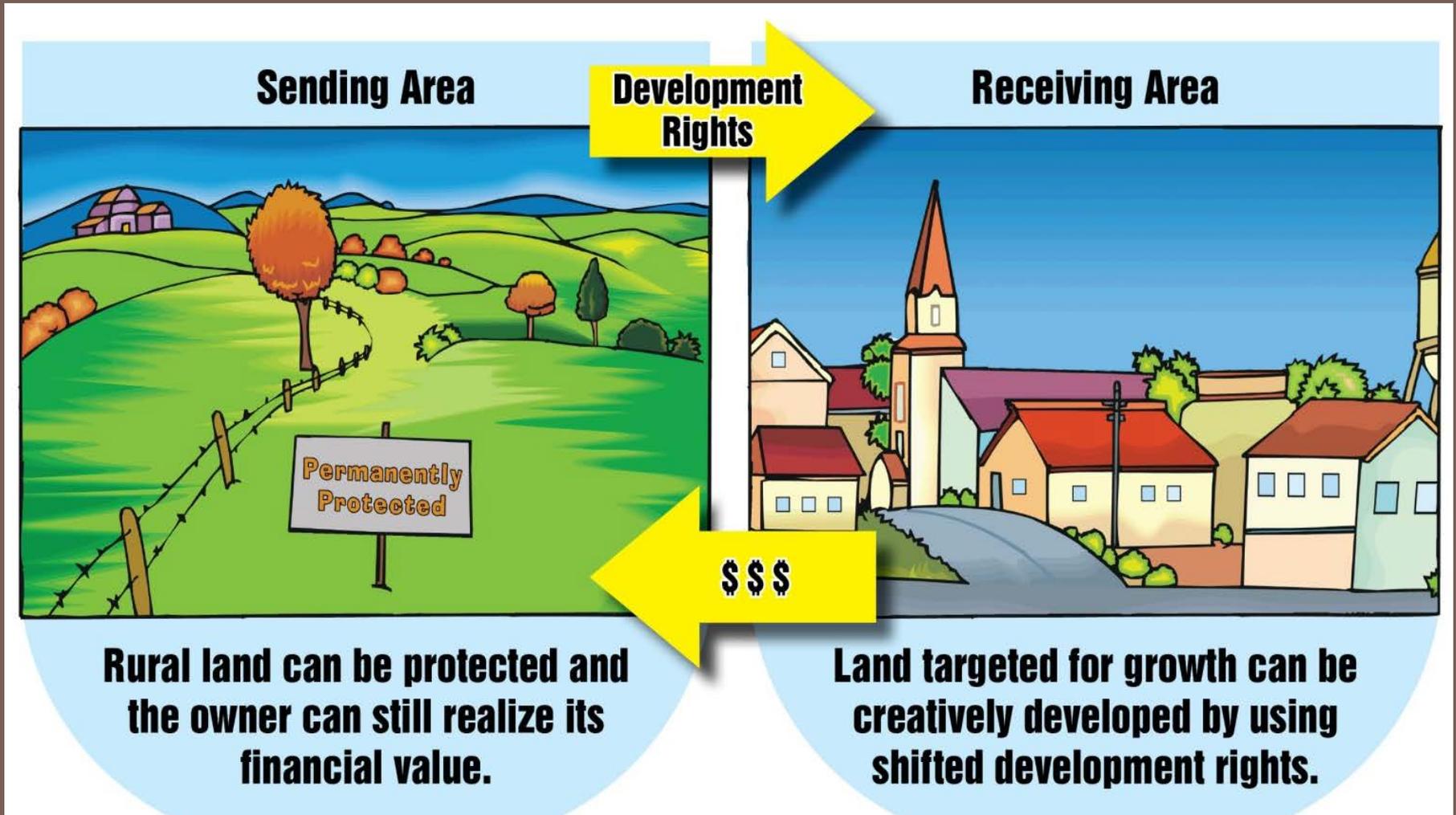


# Transfer of Development Rights

Board of Supervisors Work Session  
October 25, 2011

# 5 Challenges of TDR into James City County

2



# TDR in JCC

3

## 1. Implementation Strategy #3

- ❑ Not currently legal
- ❑ Can't *require* anything of a rezoning
- ❑ TDR must be voluntary per legislation



# TDR in JCC

4

## 2. High transfer ratios

- ❑ No net increase in units
- ❑ Ratio of 1:1 is not marketable
- ❑ Need incentives
- ❑ Downzonings or Comp Plan amendments may be necessary



# TDR in JCC

5

## 3. Proffer waivers

- ❑ Free up developer profit bringing transfer ratio closer to 1:1
- ❑ Provides incentive
- ❑ Shifts cost of TDR from private to public



# TDR in JCC

6

## 4. Floor area ratios (FAR)

- ❑ Necessary for conversions to commercial square footage
- ❑ Not currently in ordinances
- ❑ Set ratios carefully
  - Don't substantially suppress by-right commercial development
  - Low enough developers will want to seek higher FARs



# TDR in JCC

7

## 5. Sending – receiving area imbalance

- ❑ State enabling legislation
- ❑ Reduce/prioritize sending area
- ❑ Expand receiving area
- ❑ Change transfer ratios



# Decision Points

8

1. Does the Board wish to pursue a TDR program and any associated legislative and ordinance amendments necessary to enact the program?



# Decision Points

9

2. How should staff proceed with larger residential and non-residential Rural Lands updates?



**JAMES CITY COUNTY**  
**PRELIMINARY 2012 LEGISLATIVE PROGRAM**

**Part I. Legislation to be Introduced on Behalf of the County**

**CARRYOVER FROM 2011**  
**NEW FOR 2012**

1-1. LOCAL CIGARETTE TAX

Amend Virginia Code § 58.1-3831 to authorize counties with a population density in excess of 400 people per square mile, according to the most recent of the United State Bureau of Census, to levy a tax upon the sale or use of cigarettes to the same extent permitted by cities and towns.

1-2. INCLUSION OF JAMES CITY COUNTY AMONG THOSE LOCALITIES WHICH MAY ENACT AGRICULTURAL AND FORESTAL DISTRICTS OF LOCAL SIGNIFICANCE

Amend Virginia Code §§ 15.2-4402 and 15.2-4407 to include James City County among those localities which may establish agricultural and/or forestal districts of local significance.

1-3. AMEND TAX REVENUE SHARE IN LOCAL TOURISM ZONES

Amend Virginia Code § 58.1-3851.1 to remove references to “one percent” of sales tax revenues in favor of the revenue collected from “the one percent sales tax.”

1-4. INCREASED CIVIL CHARGES FOR INDIVIDUALS WHO VIOLATE CHESAPEAKE BAY PRESERVATION ORDINANCES

Amend Virginia Code § 10.1-2109.E(2) to permit localities to provide for a one-time payment of civil charges for each violation in an amount not to exceed \$25,000 for each violation.

1-5. INCREASED CIVIL PENALTIES FOR OWNERS OF PROPERTY UPON WHICH EXCESSIVE TRASH AND/OR UNCUT GRASS IS PRESENT

Amend Virginia Code § 15.2-901.C to allow localities to assess civil penalties in the amount of \$200 for the first violation and up to \$1000 for each subsequent violation of an ordinance adopted pursuant to Virginia Code § 15.2-901.

**JAMES CITY COUNTY  
2011 LEGISLATIVE PROGRAM**

**Part II. Position/Legislation Supported by the County**

2-1. STATE FUNDING FOR TOURISM

The County urges the General Assembly to increase funding for the Virginia Tourism Corporation (“VTC”) to promote tourism in Virginia generally, and the Historic Triangle in particular.

2-2. AUTHORITY TO IMPOSE IMPACT FEES

Amend Title 15.2, Chapter 22, to authorize localities to impose impact fees in order to fairly fund public infrastructure costs caused by new residential development.

2-3. APPLICATION OF TRANSIENT OCCUPANCY TAX TO TRAVEL COMPANIES AND INTERNET SALES

James City County supports a clarification of Virginia Code § 58.1-3819 et seq., to make sure that the transient occupancy tax applies to the entire amount charged for rooms by travel companies and on Internet sales regardless of any discounted rates paid by such companies for such rooms. This would provide equal taxing of room sales by Virginia businesses and Internet sales companies.

2-4. COMMUTER RAIL IN SOUTHEAST VIRGINIA

The County supports planning for a commuter rail system from Richmond through the Peninsula to Virginia Beach to connect urban centers for commuters and provide transportation alternatives for tourism.

2-5. TRANSPORTATION FUNDING

James City County urges the General Assembly to address critical transportation infrastructure needs. Transportation should be addressed as a statewide issue rather than a regional or local issue.

2-6. BEHAVIORAL HEALTH AND COMPREHENSIVE SERVICES ACT (“CSA”) FUNDING

James City County urges the General Assembly to: 1) adequately fund the Medicaid waiver program to reduce the waiting list of individuals and families now eligible for services; 2) provide services to children with serious emotional disorders; and 3) to cover reasonable administrative costs for CSA programs. Adequate funding and services will help prevent the mentally ill from being released early from treatment, living on the streets, going to jail, or being inappropriately placed in residential facilities or other government programs.

2-7. TAX EQUITY BETWEEN CITIES AND COUNTIES

James City County supports equal taxing authority for cities and counties.

2-8. SUBSTANCE ABUSE AND MENTAL HEALTH TREATMENT

James City County supports maintaining State funding for mental health and substance abuse treatment in jails and juvenile detention facilities given the overwhelming percentage of adults and

juveniles in the system diagnosed with mental health and/or substance abuse conditions.

2-9. STATE FUNDING FOR PUBLIC EDUCATION, PRE-K, K-12 AND HIGHER EDUCATION

The County supports restoring the funding cuts made to pre-K and K-12 funding. In addition, the County supports restoring the funding cuts made to higher education which could cripple some of the most prestigious higher education institutions in the world, including the College of William & Mary.

2-10. ADEQUATE FUNDING FOR PUBLIC LIBRARIES

James City County supports the State maintaining funding to public libraries to make sure that the State and the localities maintain their proportionate share of funding.

2-11. PROVIDE ADEQUATE FUNDING FOR STATE MANDATES

Given the difficult budget year faced by the Commonwealth and localities, James City County calls upon the General Assembly to oppose unfunded mandates and to reduce existing State mandates commensurate with any reduction in State funding to localities.

2-12. RESTRICTION ON IMPOSING REAL ESTATE TAXES

James City County opposes any legislation restricting local taxing authority to establish real estate tax rates or place artificial limits on the assessment of real property at its fair market value.

2-13. OPPOSE CHANGING THE PRESUMPTION OF CORRECTNESS FOR TAX ASSESSMENTS

James City County opposes any legislation which changes the presumption of correctness currently given to real and personal property tax assessments. Administrative decisions on tax assessments are entitled to a presumption of correctness. The burden should be on the taxpayer to show that a uniform system of assessment is incorrect with regard to specific property. Changing the current presumption of correctness for tax assessments will impose additional costs on the administration of government.

2-14. THE DILLON RULE

James City County supports legislation consistent with that which exists in the majority of states, to provide counties, cities and towns greater local autonomy over matters within the purview of local governments.

2-15. LEGISLATIVE PROGRAMS OF THE VIRGINIA MUNICIPAL LEAGUE AND THE VIRGINIA ASSOCIATION OF COUNTIES

James City County supports the legislative programs of the Virginia Municipal League and the Virginia Association of Counties.

2-16 MAINTENANCE OF MEDIANS

James City County supports legislation increasing funding to the Virginia Department of Transportation in an amount which will allow VDOT to resume regular maintenance of state-owned medians.

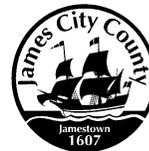
2-17 MAIN STREET FAIRNESS ACT / STREAMLINED SALES TAX AGREEMENT

James City County supports legislation enabling Virginia to endorse the Streamlined Sales Tax Agreement and to become a full member of the Streamlined Sales Tax Governing Board.

2-18 INCREASED FUNDING FOR SUBSTANCE ABUSE TREATMENT

James City County supports legislation to provide annual funding in the amount of \$6 million dollars from Virginia Alcoholic Beverage Control revenues to enable the establishment and continued funding of four “Healing Place” treatment centers in Virginia.

DRAFT



**MEMORANDUM COVER**

**Subject:** Transfer of Development Rights (TDR) Feasibility Study: Market Analysis and Final Recommendations

**Action Requested:** Shall the Board provide guidance on whether to pursue a Transfer of Development Rights (TDR) ordinance and how to proceed on ordinance amendments related to rural lands?

**Summary:** Staff has completed work with the County's consultants, Design, Community & Environment (DC&E), on the TDR feasibility study. Final recommendations, including considerations and steps that would need to be taken to implement a TDR program are attached. Staff has also provided a memorandum that goes into more detail about how various TDR strategies proposed by DC&E may look in practice in James City County and request general guidance.

For TDR to be feasible, significant changes, as outlined in the memorandum, would be required to make the program successful. Therefore, staff recommends that the Board not pursue a TDR program at this time and requests guidance regarding how to proceed with general amendments to residential and non-residential rural lands-related ordinances.

**Fiscal Impact:**  
The Director of Financial and Management Services (FMS) has reviewed the market analysis and had no comments.

**FMS Approval, if Applicable:** Yes  No

**Assistant County Administrator**  
  
Doug Powell \_\_\_\_\_

**County Administrator**  
  
Robert C. Middaugh \_\_\_\_\_

- Attachments:**
- 1. Memorandum
  - 2. Market Analysis
  - 3. Final Recommendations
  - 4. Technical Discussion of TDR, Ordinance Amendments, and Development Procedures
  - 4. Summary of Options for Next Steps

**Agenda Item No.:** \_\_\_\_\_  
  
**Date:** October 25, 2011

MEMORANDUM

DATE: October 25, 2011

TO: The Board of Supervisors

FROM: Leanne Reidenbach, Senior Planner  
Allen J. Murphy, Jr., Director of Planning/Assistant Development Manager

SUBJECT: Transfer of Development Rights (TDR) Feasibility Study: Market Analysis and Final Recommendations

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I. Introduction

Design, Community & Environment (DC&E) has completed work on the Transfer of Development Rights (TDR) Feasibility Study. The study was conducted to address Action LU 6.1.2(d) of the 2009 Comprehensive Plan which states, "Investigate the benefits and feasibility of developing and implementing a TDR program that would allow the transfer of development rights from sending to receiving areas." The following items have previously been completed and presented to the Board of Supervisors:

- Background research, comparative analysis, and kick-off work session (December 14, 2010);
- Stakeholder interviews (fall 2010 and spring 2011);
- Public forum (February 10, 2011);
- Contextual analysis showing how TDR could fit in with existing County programs (June 14, 2011 reading file item); and
- Market analysis methodology and criteria for draft sending and receiving areas (July 26, 2011 work session item).

DC&E's final recommendations take the research and analysis conducted over the course of the feasibility study into consideration and serve to distill the findings in each of the above-mentioned deliverables. Additional items that have been completed by DC&E as part of the feasibility study and are included in this packet as are follows:

- Market and land capacity analyses, including a map of preliminary suggested sending and receiving areas (Attachment No. 1) and
- Final recommendations memorandum (Attachment No. 2).

Mr. Aaron Engstrom from DC&E will be giving a presentation on the market analysis and final recommendations and Mr. Bill Fulton will also be available remotely to answer questions. The following issues detailed in DC&E's recommendations are critical considerations for establishing a TDR program (page numbers where the discussion can be found in Attachment No. 2 are in parentheses):

1. The need for high transfer ratios (i.e. one sending area unit = multiple receiving area unit) to add incentives to make TDR feasible (see pages 9 and 13). This factor makes it difficult to meet the Board's previously stated directive to maintain the same buildout capacity across the County.
2. Potential to reduce or waive proffers to try to bring transfer ratios closer to even between sending and receiving areas (see pages 8, 15, and 17).
3. Creating floor area ratio (FAR) maximums to be able to accommodate transfers that involve a conversion of residential units to commercial square footage (see pages 5-6 and 15-16).

4. Acknowledgment of the imbalance between the small amount of potentially adequate receiving areas and the larger area desired to be preserved in sending areas (see pages 3, 8-10, 13, and 14).
5. Implementation Strategy No. 3, which would require TDRs for any rezoning, is currently not permitted under State Code (see pages 7-8). Use of TDRs must be voluntary under the enabling legislation and nothing can be required of a rezoning (i.e. items must be voluntarily proffered).

While DC&E's recommendations provide a framework for TDR based on case studies and a County-specific market analysis, this memorandum is intended to provide a more detailed look at the realities and challenges of implementing TDR in James City County and presents staff's recommendations. Attachment No. 3 is a technical discussion about how the strategies proposed by DC&E may actually look in the County if a TDR program is pursued.

## II. Recommendations

Though a TDR program could be feasible in James City County based on the feasibility study, difficult decisions and significant changes would be required to establish the right conditions to make the program successful. In consideration of the following reasons, staff recommends that the Board not pursue a TDR program at this time:

1. The most effective options for implementation would increase the number of units able to be built in the County, which would not meet the Board's directive from the December 2010 work session. The options that would not increase buildout would require a downzoning of receiving areas, sending areas, or both. A transfer ratio of one sending area equaling one receiving area would not be marketable in the County.
2. Strategies proposed to further incentivize the use of TDRs and bring the transfer ratio closer to one sending area equaling one receiving area would involve waiving proffers for transferred units. This would shift the cost of a TDR program from private developers to the public to mitigate the impacts of the additional units.
3. Significant changes would be required to ordinances potentially in both sending and receiving areas, especially regarding setting commercial floor area ratio maximums if residential unit to commercial square footage transfers are permitted. Depending on where the FAR is set, this factor could limit the size of by-right commercial development and make larger commercial projects more costly since developers would have to pay for TDRs to reach higher FARs. Comprehensive Plan amendments related to residential density may also have to be pursued depending on the implementation strategy employed.
4. The implementation options that would not increase the number of units able to be built in the County would only conserve about 28 percent of the sending area due to the high transfer ratios, the large sending area, and the small receiving area. The Board would need to prioritize and reduce sending areas or expand receiving areas.

## III. Next Steps

At the initial work session in December 2010, the Board decided to complete the TDR feasibility study prior to determining how to proceed with ordinance amendments related to rural lands. The next steps for evaluating rural lands ordinances and policies largely depend on how the Board decides to proceed relative to TDR. Attachment No. 4 details two general options for proceeding.

Option 1 - is if the Board votes to pursue a TDR program, many of the decision points related to this are further evaluated in DC&E's attached recommendations. Please note that carrying out the necessary steps could delay the timeline of some of the Zoning Ordinance Update items or necessitate that ordinances that have already been amended be reevaluated for additional changes.

Option 2 - is if the Board does not want to pursue a TDR program at this time.

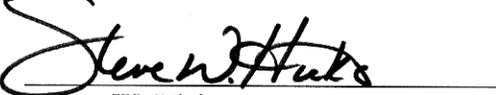
Again, based on the challenges identified in part III of this memorandum, staff does not recommend pursuing a TDR program in James City County. If the Board elects to pursue a TDR program, staff requests guidance on the discussion points presented in DC&E's final recommendations memorandum. If the Board elects not to pursue a TDR program, staff requests guidance regarding how to proceed with general amendments to residential and non-residential rural lands-related ordinances.

  
Leanne Reidenbach

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Allen J. Murphy, Jr.

CONCUR:

  
Steven W. Hicks

LR/AJM/nb  
TDRFinRecom\_mem

Attachments:

1. Market Analysis
2. Final Recommendation
3. Technical discussion of TDR, Ordinance Amendments, and Development Procedures
4. Summary of Options for Next Steps

## MEMORANDUM

DATE October 11, 2011

TO Board of Supervisors  
James City County

FROM Bill Fulton, Aaron Engstrom, Rick Pruetz

RE **DRAFT TRANSFER OF DEVELOPMENT RIGHTS MARKET ANALYSIS**

The Planning Center | DC&E conducted a market analysis to determine the likely value of Transfer of Development Rights in an open market created by a Transfer of Development Rights (TDR) program in James City County. This analysis was conducted using a Residual Land Value methodology in both sending and receiving areas. The purpose of this analysis is fourfold:

First, to determine what the value of a TDR would have to be in order for a sending-area landowner to have the financial incentive to participate in the TDR market.

Second, to determine whether receiving-area developers would have the financial incentive, under foreseeable market conditions, to participate in the TDR market.

Third, to determine what the “transfer ratio” would have to be in order for the market to be calibrated. The transfer ratio is the number of units or amount of floor-area ratio in the receiving area that could be obtained through the use of one TDR from the sending area.

Fourth, to use geographic information software (GIS) to estimate whether the receiving areas are sufficient to conserve the sending areas.

In both sending and receiving areas, The Planning Center | DC&E had to make assumptions about the nature of the TDR program in order to conduct the analysis. These assumptions included three different implementation strategies for the TDR program’s operation in the receiving areas. These strategies are explained in this memorandum in order to help understand the financial analysis. The merits of these options are discussed in a final memorandum providing recommendations to the County.

## TDR VALUE TO SENDING AREA LANDOWNERS

For the purposes of this analysis, we assumed that sending-area developers would have the right to either exercise all their development rights on their property or sell all or some of their rights in the TDR program. For example, a landowner who possesses 30 acres of property zoned at one dwelling unit per 3 acres (du/ac) would have 10 development rights. He or she could build 10 units on-site; sell ten development rights in the TDR program; or choose any combination of the two.

The financial analysis concluded one TDR from the sending area should be worth approximately \$40,000. In other words, this is the amount a sending-area landowner must receive in order to have the financial motivation to choose to sell the development right into the TDR market rather than use it on site. This value was derived through a pro forma analysis of a 100-unit subdivision on a 300-acre property outside the Primary Service Area (PSA). The pro forma analysis included all standard costs associated with such a development, including typical proffers, as well as an "industry standard" profit margin of 13 percent.

## VALUE OF BONUS UNITS OR BONUS FLOOR AREA RATIO TO RECEIVING-AREA DEVELOPERS

The financial analysis also included extensive examination of the financial value to receiving-area developers of obtaining bonus units or floor-area ratio by acquiring TDRs. This financial analysis was run several times to include two different sets of variables:

1. Three strategies regarding how the TDR program would be implemented in the receiving areas, and
2. Four different development prototypes.

### TDR Implementation Strategies

For receiving-area landowners, the James City County TDR Program could be implemented in one or more of three different ways. These options are described here to help explain the financial analysis, but the merits of each are discussed elsewhere.

*IMPLEMENTATION STRATEGY 1: Require developers to provide TDRs to obtain maximum density currently permitted.*

Under this option, receiving-area developers could obtain a portion of the density permitted under current zoning through normal processes, but use TDRs to obtain to maximum density permitted. For example, if a zoning designation permits up to 4 du/ac, the County may permit up to 2 du/ac without TDRs but require TDRs for the developer to move up to the maximum 4 du/ac. This approach would permit the County to craft a program without increasing overall densities or the overall Comprehensive

Plan recommended densities/buildout, but it would require developers to meet an additional requirement to obtain the maximum density permitted in the Comprehensive Plan.

*IMPLEMENTATION STRATEGY 2: Require developers to provide TDRs to obtain bonus densities beyond currently permitted maximum.*

Under this option, receiving-area developers could use TDRs to obtain bonus units or bonus floor area ratio (FAR) above what the zoning designation currently permits. For example, if a zoning designation permitted up to 4 du/ca, the use of TDRs may permit developers to move above that level – to, say, 6 du/ac. This approach would give developers significant incentive to participate in the TDR program, but only if there is sufficient demand for higher densities in the receiving area. However, this option could also increase the overall amount of development in receiving areas, possibly requiring the County to revisit the recommended densities/buildout in the Comprehensive Plan.

*IMPLEMENTATION STRATEGY 3: Require developers to provide TDRs as part of a rezoning.*

Under this option, TDRs would be required for a rezoning in the receiving areas – for example, from A-1 or R-8 to R-4 or R-5. As with Option 1, this approach would permit the County to craft a program without increasing overall densities or the overall Comprehensive Plan recommended densities/buildout, but it would require developers to meet an additional requirement to obtain maximum density permitted in the zoning ordinance.

This strategy would surely generate significant demand from TDRs. However, requiring TDRs for a rezoning is not permissible under the state TDR law. The TDR alternative for developers may have to be included in the County's proffer guidelines, or, alternatively, the County could seek legislative change to explicitly permit that TDRs can be required in a rezoning situation.

## Prototypes

The pro-forma analyses were based on four different development prototypes, all of which were assumed to have typical James City County project costs, including a standard proffer package, as well as the industry-standard 13 percent profit margin. Any revenue above a 13 percent profit margin is assumed to be available to purchase TDRs for the purpose of obtaining bonus units or FAR.

The four prototypes were as follows:

- ◆ A single-family subdivision in R-2 cluster lots inside the PSA.
- ◆ Townhome development inside the PSA.
- ◆ Apartment development inside the PSA.
- ◆ Office and industrial development in the Economic Opportunity (EO) area.

## Results

As Table 1 suggests, the value of bonus units or bonus FAR to developers proposing these projects varies widely based on the type of project and which TDR strategy is used.

In general, the value of bonus density was high for developers of single-family subdivisions inside the PSA, townhomes inside the PSA, and office/industrial projects in the EO area. By comparison, the value of bonus density for rental apartments was very low.

The value of bonus density was by far the highest under Strategy 2, the option that would permit bonus density above current zoning maximums. Bonus density value was lowest under Strategy 3, the option that would require purchase of TDRs for a rezoning.

## TRANSFER RATIOS

A transfer ratio is the ratio between one TDR from the sending area and bonus density in the receiving area. Transfer ratios are established to calibrate sending- and receiving-area values. For example, if a sending-area TDR is valued at \$30,000 and one bonus dwelling unit in a receiving area is valued at \$10,000, then the transfer ratio would be established at 3:1. This would mean that one TDR purchased from the sending area would be redeemed for 3 bonus units in the receiving area.

Because bonus density values range widely, recommended transfer ratios vary widely as well. In general, however, the transfer ratio is the inverse of the bonus density values. For example, because bonus density value for townhomes under Strategy 1 is high (approximately \$10,000), then the transfer ratio is low (approximately 4:1). This means that a townhome developer who purchases one TDR from the sending area should be allowed to redeem that TDR for four bonus townhomes in the receiving area.

Conversely, because the value of a bonus apartment unit is low, the transfer ratio is high. Under Strategy 1, a bonus apartment unit is worth \$1,020, meaning the transfer ratio should be approximately 39:1. In other words, an apartment developer in the receiving area who purchases one TDR from the sending area should be allowed to redeem that TDR for 39 bonus apartment units.

The office/industrial project was modeled assuming base FAR is similar to that found in the existing Stonehouse Industrial Park and Busch Corporate Center, where FARs range from 0.2 to 0.3. Bonus FAR was calculated in 5,000-square-foot increments. For example, the financial analysis found that under Option 1, 5,000 square feet (sf) of bonus FAR should be worth approximately \$7,450, meaning a transfer ratio of approximately 5.4 should be established. Thus, an office/industrial developer in the EO area who purchased one TDR in the sending area should be able to redeem that TDR for approximately 27,000 sf of additional FAR (5,000x5.4) in the EO area.

TABLE I **ESTIMATED TDR VALUES AND TRANSFER RATIOS**

<b>Representative Zone District and Prototype</b>	<b>Estimated Value per TDR</b>	<b>Preliminary Transfer Ratio (Receiving Area Bonus Density to Sending Area TDR)</b>
Sending-Area TDR in A-1 Zone	\$40,000	n/a
<b>Receiving-Area TDR in R-2 Zone (Single-Family Lots)</b>		<b>(Lots/TDR)</b>
TDR Implementation Strategy 1	\$5,790	6.9/1
TDR Implementation Strategy 2	\$11,580	3.5/1
TDR Implementation Strategy 3	\$3,130	12.8/1
<b>Receiving-Area TDR in R-5 Zone (Townhomes)</b>		<b>(Dwelling Units/TDR)</b>
TDR Implementation Strategy 1	\$10,050	4.0/1
TDR Implementation Strategy 2	\$10,050	4.0/1
TDR Implementation Strategy 3	\$2,610	15.3/1
<b>Receiving-Area TDR in R-5 zone (Residential Apartments)</b>		<b>(Dwelling Units/TDR)</b>
TDR Implementation Strategy 1	\$1,020	39.2/1
TDR Implementation Strategy 2	\$2,040	19.6/1
TDR Implementation Strategy 3	\$350	114.3/1
<b>Receiving-Area TDR in EO Area (Office/Industrial)</b>		<b>(FAR Units/TDR<sup>a</sup>)</b>
TDR Implementation Strategy 1	\$7,450	5.4/1
TDR Implementation Strategy 2	\$14,850	2.7/1
TDR Implementation Strategy 3	\$2,700	14.8/1

<sup>a</sup> Each FAR unit is 5,000 square feet of bonus commercial floor area.

## TDR SUPPLY

Implementation Strategy 1 was evaluated in GIS to estimate the TDR supply and demand under the Comprehensive Plan shown in Figure 1. There are 5,478 sending-area TDRs outside of the PSA. With the transfer ratios, 1,547 of the sending-area TDRs could be absorbed in the receiving areas shown in Figure 2. This would result in 28 percent of the sending area TDRs under conservation easements, or approximately 4,500 acres total.

## CONCLUSION

Table 1 on page 5 shows that the value of one sending-area development right at \$40,000 always exceeds the value of one receiving-area development right. A transfer ratio will be required to facilitate successful transfers in a TDR market. Recommended transfer ratios are listed on the table's right-hand column. In order to equal the value of one sending-area TDR, the lowest ratio is 1 to 2.7 – 5,000 sf increments of floor area in the EO area under Implementation Strategy 2. The highest ratio is 1 to 114 apartment units under Implementation Strategy 3.

Across the board, TDR Implementation Strategy 2 results in the highest receiving-area TDR values per unit; however this is the strategy that would be used the least by developers because it would not be included in every project. Implementation Strategies 1 and 3 would be used in practically every project and therefore generate the most revenue for TDRs.

In order for Implementation Strategy 2 to permit the County to craft a program without increasing number of units under buildout, the sending areas would need to be down-zoned or a substantial number of sending-area units would need to be converted to commercial EO space. Unlike the other strategies, Implementation Strategy 2 would generate additional revenue for developers and therefore be more likely to be supported by the development community.

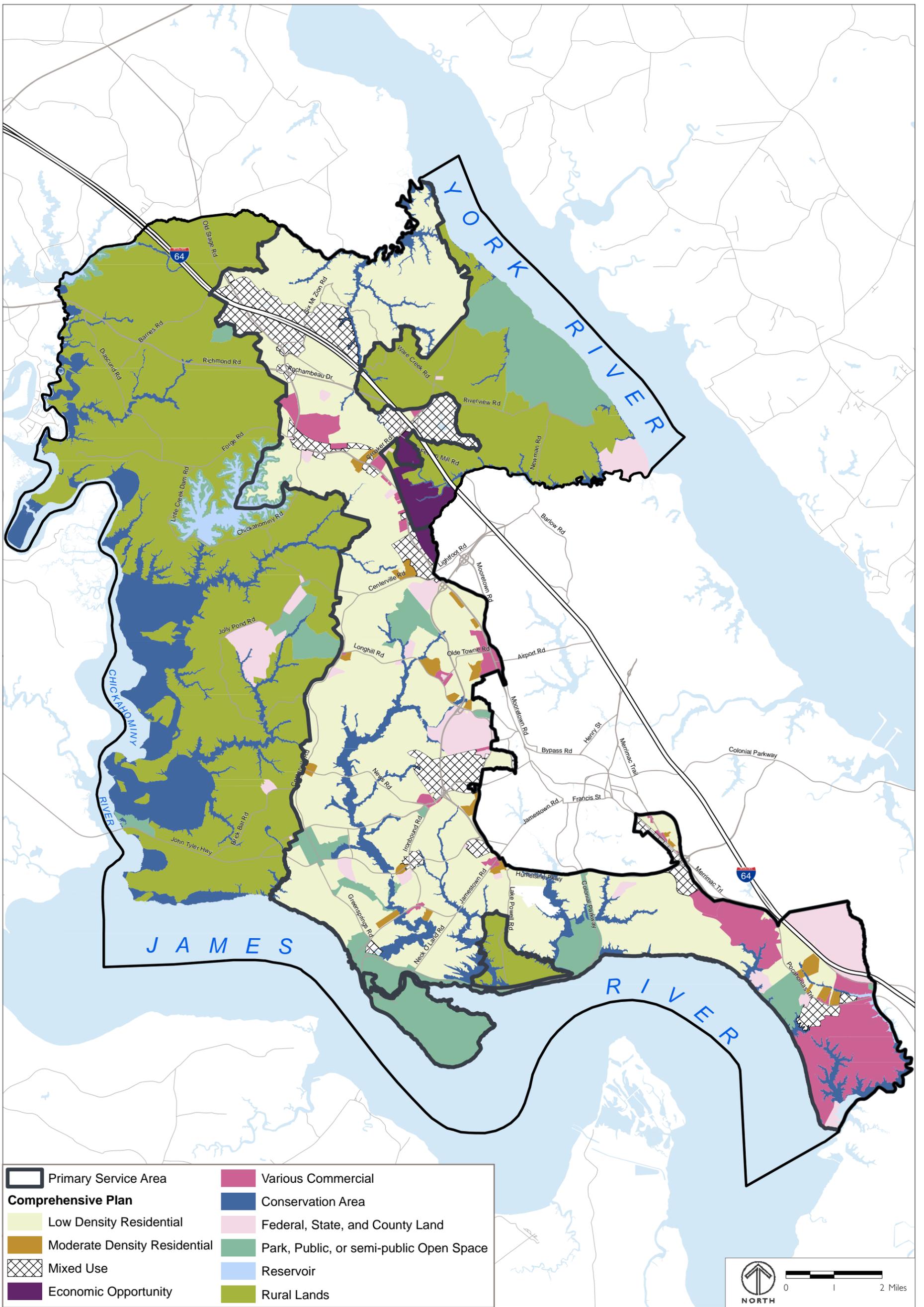


FIGURE 1  
COMPREHENSIVE PLAN MAP

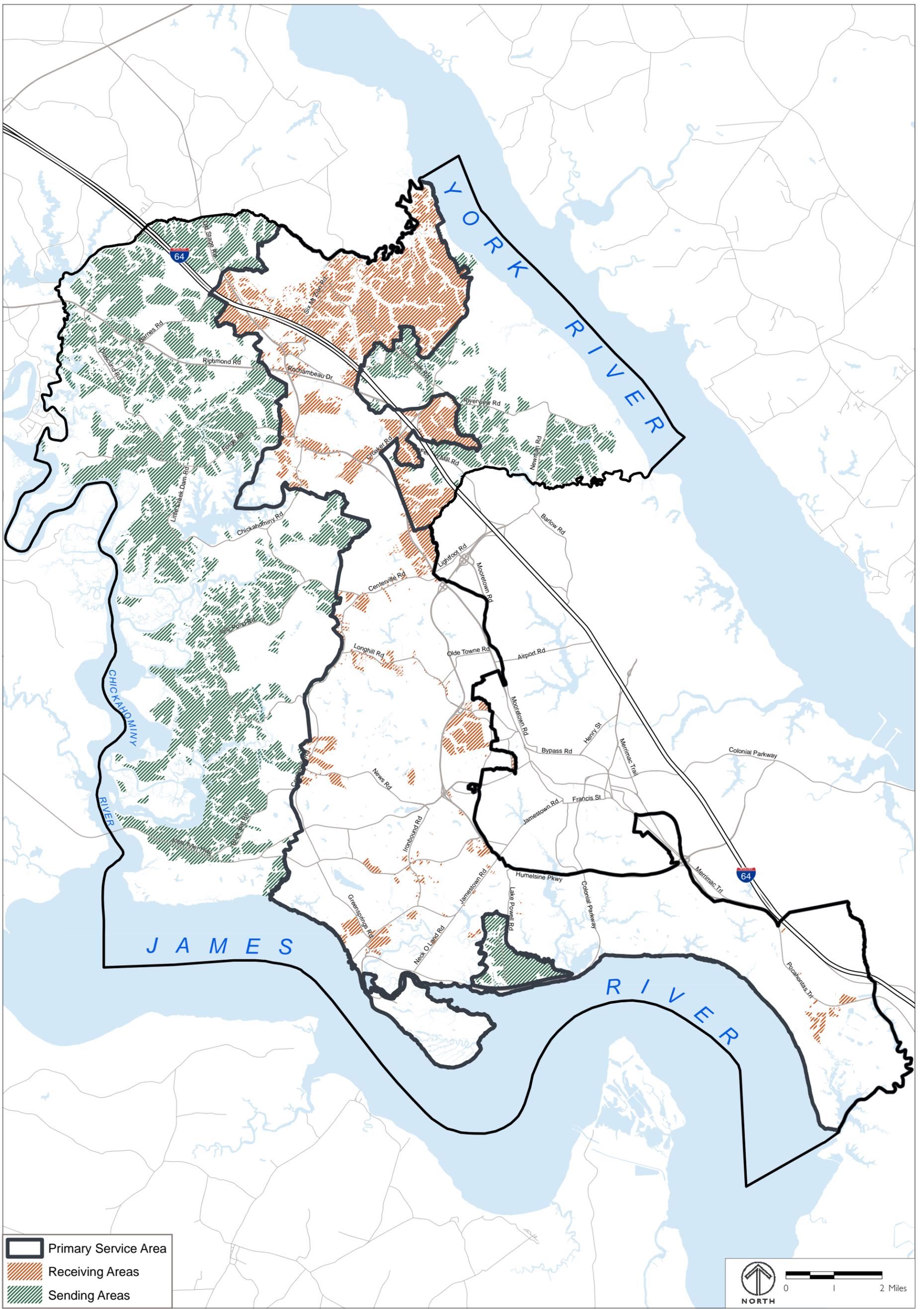


FIGURE 2  
TDR SENDING AND RECEIVING AREA CANDIDATE PARCELS

## APPENDIX A: RESIDUAL LAND VALUE ANALYSIS

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### RESIDUAL LAND VALUE ANALYSIS

The pro forma residual land value analysis methodology applies development economics to model the costs and values associated with improving a site in a specific manner and intensity described in the analysis. From a developer's perspective, if the project is *financially feasible*--a term used to describe a situation where the revenues equal cost plus a 13 percent profit margin--then the project would be built in the manner specified. If project revenues exceed costs and yield profit higher than 13 percent, we assume some of this profit in excess of the 13 percent margin can be used for the purchase of TDRs. This document refers to projects with a profit margin higher than 13 percent as being *TDR feasible*.

The residual land value strategy is consistent with Strategy 2 on page 3. However implementation strategies discussed in numbers 1 and 3 above may not allow a developer to accrue higher profit through TDRs, if TDR compliance is required for project densities that can already be achieved, either by-right or through a special use permit.

Using the hypothetical development prototype pro forma analysis described above, The Planning Center | DC&E evaluated the projects that are likely to be built in sending and receiving areas, and estimated TDR values and transfer ratios summarized according to implementation strategy in Table 1 on page 5.

#### Sending-Area Prototypes

##### *Single-Family Residential*

A single-family residential large-lot subdivision prototype was modeled in an A-1 zone to estimate TDR value in the sending area. This prototype was initially modeled at a 3-acre minimum lot size, with 100 units on a 300-acre site. Since there is a possibility of down-zoning the sending area, this prototype was also modeled at a density of one du/10 ac, with 30 units on a 300-acre site. This comparison permitted an evaluation of the difference in development right values under the existing regulations, and an alternative sending-area zoning scenario that would downzone the sending areas. The down-zoning of sending areas can be a valuable tool if it is used to offset TDR transfer ratios under the *Zero Net Increase* goal for the program.

The analysis resulting from comparison of 1-a and 1-b below reveals that down-zoning the land from 3- to 10-acre minimum lot size changes the value of a development right from \$40,000 to \$96,600.

### ***1-a: Single-Family Residential at 1 Du/3 Ac***

#### Description of the Prototype Modeled

This pro forma modeled 100 units on a 300-acre subdivision. Each unit modeled was a prototypical 2,500-sf home with a 400-sf garage built with Type V-B wood construction. The project included costs for 2.5 miles of rural roads.

The costs per unit included a \$40,000 central well fee as well as a private septic and a standard water connection fee of \$8,000. Unit sale prices were assumed to be \$496,000 each because the market analysis revealed that quality new housing product ranges in the \$500,000s.<sup>1</sup> Land costs were assumed to be low, at \$10,000 per acre due to the location outside of the PSA.

This project was financially feasible for the developer. Under this scenario there was \$43.9 million in total project costs and \$49.6 million in total project revenue. A developer accrued \$5.7 million in profit. Including the 13 percent return on the project, the TDR value was \$57,000 per unit.

While the total land cost for the 3-acre site is \$30,000, this analysis shows that the speculative value of a development right on the 3 acres is \$57,000. Therefore the recommended value for a sending-area development right for the TDR program should be \$40,000 because this price point will compete with development interests and reward landowners for conserving their land

#### TDR Value

This analysis was used to estimate the price of a sending-area development right by estimating the profit a developer would accrue by developing a sending area site at its "highest and best use". While a variety of situations apply to landowners, we base the estimated TDR value on the estimated profit of a residential project.

### ***1-b: Single-Family Residential at 1 du/10 ac***

#### Description of the Prototype Modeled

This pro forma modeled 30 units on a 300-acre subdivision. The other parameters for each unit are the same as 1-a.

The costs per unit included the same fees as 1-a. Unit sale prices were assumed to increase to \$660,000 each due to the larger lot size. Land costs were reduced to \$8,000 per acre due to the decreased development potential as a result of the down-zoning.

This project was financially feasible for the developer. Under this scenario there was \$17.7 million in total project costs and \$19.8 million in total project revenue. A developer accrued \$2.2 million in profit. Including the 13 percent return on the project, the TDR value was \$96,600 per unit on each 10-acre site.

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<sup>1</sup> Based on a historical sampling of new product sales from 2001 to present. This price may not be substantial for 2011 sales due to the small number of comparable product types.

### TDR Value

This analysis was used to estimate the price of a sending-area development right if the minimum lot size in the sending area is increased to 1 du/10 ac. As in 1-a, the methodology assumed a developer would be motivated to accept the estimated profit of this project upfront by selling TDRs rather than incurring the opportunity cost of developing the site. If a down-zoning is implemented the transfer ratios shown in Table 1 should be recalibrated from \$40,000 per unit to \$96,600 per unit.

## Receiving-Area Prototypes

### *Single-Family Residential*

#### Description of the Prototype Modeled

There is a dichotomy in how subdivisions are built inside the PSA. Some developers build turn-key projects, while other developers subdivide, lay infrastructure and then sell these improved lots in blocks for home construction by a tract builder. Based on Planning Staff project experience, the latter method is more commonly practiced and is evaluated here under the assumption that the subdivider would subdivide lots to achieve TDR compliance.

The single-family residential prototype modeled for receiving areas inside the PSA was a 5-acre subdivision with 20 improved lots in an R-2 district with cluster overlay. With area for roads and open space subtracted, the average lot size was 8,700 sf. The appendix describes infrastructure improvements included in the model, including roads, and sewer and water main extensions.

Land acquisition costs are 3 to 5 times higher inside the PSA than outside the PSA. This prototype assumed that the land cost was \$25,000 per acre and the sale prices per lot was \$75,000.

This project is TDR feasible. Under this scenario there was \$664,000 in total project costs and \$750,000 in total project revenue. A developer would accrue \$86,000 in profit. After the 13 percent return on the project, the TDR feasible value was \$57,900 on the 5-acre project.

### Bonus Density Value

Based on this analysis, a subdivision in the R-2 zone with a cluster overlay can require TDR compliance based on the three implementation strategies at the following price points:

- ◆ **Strategy 1:** This strategy requires TDRs for densities that can already be achieved, either by-right or through a special use permit for a cluster overlay; in this case to increase project density from two lots per acre (lots/ac) to 4 lots/ac. This would result in 10 bonus lots (4 lots/ac x 5 acres = 20 lots with TDRs minus 2 lots/ac x 5 acres = 10 lots at the TDR baseline). If there is \$57,900 in TDR-feasible profit divided by 10 bonus units the resulting value is \$5,790 per bonus unit for TDRs.
- ◆ **Strategy 2:** This strategy requires TDRs to exceed currently permitted densities; in this case to increase project density from 4 lots/ac to 5 lots/ac. This would result in five bonus lots (5 lot/ac x 5 acres = 25 units with TDRs minus 4 du/ac x 5 acres= 20 units at the TDR baseline). If there is

\$57,900 in TDR-feasible profit divided by 5 bonus units the resulting value is \$11,580 per bonus unit for TDRs.

- ◆ **Strategy 3:** This strategy would require TDRs for up-zoning from A-1 or R-8 to R-2 with a cluster overlay; in this case, to increase project density from a 3-acre minimum lot size to 4 lots/ac. This would result in about 18.5 bonus units (4 lots/ac x 5 acres = 20 lots with TDRs minus 0.33 lots/ac x 5 acres = 1.65 lots at the TDR baseline). If there is \$57,900 in TDR feasible profit divided by 18.5 bonus lots, the resulting value is \$3,130 per bonus unit for TDRs.

## Townhome

### *Description of the Prototype Modeled*

The townhome prototype modeled for receiving areas inside the PSA was a 5-acre subdivision with 40 units. With area for roads and open space subtracted, the building footprints covered one acre and the surface parking also covered 1 acre of the site.

Currently, townhomes in the R-5 district can be built to a density of 8 du/ac; however, a density bonus of up to 20 percent may be granted for additional setbacks, recreation areas, landscape design, or public facility sites set aside by a developer, for a maximum density of 9.6 du/ac.

Townhomes are gaining in popularity in James City County and have continued to sell even while demand for other product types has recently subsided. In New Town sale prices for premium townhomes have reached a price point of \$600,000. This prototype assumed a land cost of \$43,560 and a unit sale price of \$399,000.

This project is TDR feasible. Under this scenario there was \$17.6 million in total project costs and \$20 million in total project revenue. A developer would accrue \$2.5 million in profit. After the 13 percent return on the project, the TDR feasible value was \$100,500 on the 5-acre project.

### *Bonus Density Value*

Based on this analysis, a townhome project in the R-5 zone can require TDR compliance based on the three implementation strategies at the following price points:

- ◆ **Strategy 1:** This strategy requires TDRs for densities that that can already be achieved, either by-right or through a special use permit.; in this case to increase project density from 6 du/ac units to 8 du/ac. This would result in 10 bonus units (8 du/ac x 5 acres = 40 units with TDRs minus 6 du/ac x 5 acres = 30 units at the TDR baseline). If there is \$100,500 in TDR-feasible profit divided by 10 bonus units, the resulting value is \$10,050 per bonus unit for TDRs.
- ◆ **Strategy 2:** This strategy requires TDRs to exceed currently permitted densities; in this case to increase project density from 8 du/ac units to 10 du/ac. This would result in 10 bonus units (10 du/ac x 5 acres = 50 units with TDRs minus 8 du/ac x 5 acres = 40 units at the TDR baseline). If

there is \$100,500 in TDR feasible profit divided by 10 bonus units the result is \$10,050 per bonus unit for TDRs.

- ◆ **Strategy 3:** This *Demand* strategy would require TDRs for up-zoning from A-1 or R-8 to R-5; in this case to increase project density from a 3-acre minimum lot size to 8 du/ac. This would result in about 38.5 bonus units (8 du/ac x 5 acres = 40 units with TDRs minus 0.33 du/ac x 5 acres = 1.65 lots at the TDR baseline). If there is \$100,500 in TDR feasible profit divided by 38.5 bonus units, the resulting value is \$2,610 per bonus unit for TDRs.

## Multi-Family Residential Apartments

### *Description of the Prototype Modeled*

In the R-5 zoning district, the typical density for an apartment project is 11 du/ac; however, existing projects range between 8.5 and 14.35 du/ac. The higher density ranges require a density bonus of up to 20 percent to be granted for additional setbacks, recreation areas, landscape design, or public facility site set-asides.

A 60-unit apartment project was modeled on a 5-acre lot with a unit mix of 25 percent one-bedroom units and 75 percent two- to three-bedroom units. The density was 12 du/ac.

Apartment projects have experienced an upswing in demand while demand for other product types has subsided. In New Town, the two- to three-bedroom rental rates currently from \$1,330 per month to \$1,560.<sup>2</sup> This analysis assumed new 1-bedroom apartments leased at \$1,120 per month and 2- to 3-bedroom apartments at \$1,440 per month.

This project is TDR feasible. Under this scenario there was \$11.0 million in total project costs and \$660,000 in net operating income. After 10 years the project is sold and the developer receives \$8.1 million in before tax cash flow over the term. After the lease rates and a 15 percent internal rate of return on the project, the TDR value was \$20,400 on the 5-acre project. This return would also be accrued every year for the duration of the project, but TDRs are only required in exchange for an occupancy permit and can therefore only be required based on the initial profit. For this reason for-sale projects generate more upfront revenue for TDRs than rentals.

### *Bonus Density Value*

Based on this analysis, an apartment project in the R-5 zone can require TDR compliance based on the three implementation strategies at the following price points:

- ◆ **Strategy 1:** This strategy requires TDRs for densities that that can already be achieved, either by-right or through a special use permit; in this case to increase project density from 8 du/ac units to 12 du/ac. This would result in 20 bonus units (12 du/ac x 5 acres = 60 units with TDRs minus 8

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<sup>2</sup> These lease rates are among the highest in the County and may not be feasible in all projects.

du/ac x 5 acres = 40 units at the TDR baseline). If there is \$20,400 in TDR feasible profit divided by 20 bonus units, the resulting value is \$1,020 per bonus unit for TDRs.

- ◆ **Strategy 2:** This strategy requires TDRs to exceed currently permitted densities; in this case to increase project density from 12 du/ac units to 14 du/ac. This would result in 10 bonus units (14 du/ac x 5 acres = 70 units with TDRs minus 12 du/ac x 5 acres = 60 units at the TDR baseline). If there is \$20,400 in TDR feasible profit divided by 20 bonus units, the resulting value is \$2,040 per bonus unit for TDRs.
- ◆ **Strategy 3:** This strategy would require TDRs for up-zoning from A-1 or R-8 to R-5; in this case to increase project density from a 3-acre minimum lot size to 12 du/ac. This would result in about 58.35 bonus units (12 du/ac x 5 acres = 60 units with TDRs minus 0.33 du/ac x 5 acres = 1.65 units at the TDR baseline). If there is \$20,400 in TDR feasible profit divided by approximately 58.35 bonus units, the resulting value is \$350 per bonus unit for TDRs.

## Office and Industrial

### *Description of the Prototype Modeled*

The EO area offers a new alternative to existing office and industrial districts. Located adjacent to the PSA, with rail and freeway access, the EO area was designated primarily for commercial development in the Comprehensive Plan update but is currently zoned for agriculture use. James City Service Authority also noted that the site is very well positioned geographically to be served by sewer and water. This large 900-plus acre site is promising for many types of development, but it is particularly well-suited to pioneer new types of office and light industrial uses for the County, specifically flex-tech and R&D space.

This prototype was modeled under conditions similar to other office and industrial sites, such as Stonehouse Industrial Park and Busch Corporate Center, where the FAR ranges from 0.2 to 0.3 on a 10-acre site. The uses were weighted toward higher value, higher density office use, with 80 percent or 122,000 sf of office space and 20 percent, or 30,000 sf of R&D/flex-tech light industrial condominiums that reached a maximum 0.35 FAR in order to evaluate the value for floor area if the EO ordinance was amended to include a FAR cap for TDRs.

It is likely that the prices required for project feasibility will be realized by the time the EO area is rezoned and a TDR program is adopted. Table A-1 below compares the estimated current lease and capitalization rates to the lease and capitalization rates likely to be required to successfully develop this prototype in the EO area and generate demand for TDRs.

TABLE A-1 **CURRENT VERSUS FUTURE OFFICE/LIGHT INDUSTRIAL MARKET REVENUE RATES COMPARISON**

	Office		Light Industrial	
	Existing	Future	Existing	Future
Monthly Lease Rate per SF	\$1.26	\$2.30	\$0.60	\$0.75
Percent Capitalization Rate <sup>a</sup>	10.0%	8.75%	10.0%	8.75%

<sup>a</sup> According to [www.property-investing.org](http://www.property-investing.org), "The capitalization rate, or cap rate, is a factor that translates property income into an estimate of property value. The formula for the estimation of a property's value (V) using the capitalization rate is:  $V = \text{Net Operating Income} / \text{Capitalization Rate}$ ."

TABLE A-2 **TDR VALUES FOR BONUS FAR RANGES**

A TDR Range from Baseline FAR to max FAR with TDR Bonus	B Total Amount of Bonus Square Footage Allowed with TDRs	C Value per Bonus Square Foot	D Aggregated Value per 5,000-SF Increment of Bonus FAR
0.20-0.30 (Strategy 1)	43,560	\$1.49	\$7,450
0.30-0.35 (Strategy 2)	21,780	\$2.97	\$14,850
0.01-0.35 (Strategy 3)	120,700	\$0.54	\$2,700

Historically, there is precedence for these "future" price points listed in Table A-1 for office and light industrial space in James City County and Williamsburg; therefore, these are assumed to be reasonable rates in a better economy, for new products types, in a premium location.<sup>3</sup> While the other prototypes are evaluated for TDR implementation under current market conditions, more time will be required to integrate TDR into the EO zoning ordinance for the EO area and therefore the pro forma expects that the rates listed in Table A-1 can be realized at a time in the future when the PSA is amended to include the EO area.

<sup>3</sup> Based on conversations with CB Richard Ellis and Brooks Real Estate. Loopnet.com, Landwatch.com and other commercial real estate listing services were referenced.

The project will be TDR feasible. Under this scenario there was \$32.4 million in total project costs and \$36.6 million in total project revenue. A developer would accrue \$4.2 million in profit. Given the 13 percent return on the project, the TDR feasible value was \$64,700 to spend on TDRs.

#### *Bonus Density Value*

Based on this analysis, a hi-tech commercial project in the EO area can require TDR compliance based on the three implementation strategies at price points described below. The analysis assumes one TDR is equal to 5,000 sf of commercial floor space.

- ◆ **Strategy 1:** There are no FAR restrictions in the EO but the concept of requiring TDRs for density already permitted can apply to this example assuming a baseline FAR is set at 0.20 and project density increases from 0.20 FAR to 0.30 FAR. This would result in 43,560 sf of floor area (0.30 FAR x 10 acres x 43,560 ft = 130,680 sf of floor area with TDRs minus 0.20 x 10 acres x 43,560 ft = 87,120 sf at the TDR baseline). If there is \$64,700 in TDR-feasible profit divided by 43,560 sf of bonus FAR the resulting value is \$1.49 per bonus square foot for TDRs. At 5,000 sf per TDR there was \$7,450 per 5,000 sf commercial TDR increment.
- ◆ **Strategy 2:** This strategy requires TDRs to exceed currently permitted densities; in this case to increase project density from 0.30 FAR to 0.35 FAR. This would result in 21,780 sf of bonus floor area (0.35 FAR x 10 acres x 43,560 ft = 152,460 sf of floor area units with TDRs minus 0.30 x 10 acres x 43,560 ft = 130,680 sf at the TDR baseline). If there is \$64,700 in TDR-feasible profit divided by 21,780 sf of bonus FAR, the resulting value is \$2.97 per bonus square foot for TDRs. At 5,000 sf per TDR this equals \$14,850 per 5,000 sf commercial TDR increment.
- ◆ **Strategy 3:** This strategy would require TDRs for up-zoning from A-1 or R-8 to EO; in this case to increase project density from a typical 10,000 sf commercial use in an A-1 zone to a commercial district that permits up to 0.30 FAR. This would result in about 120,700 sf of bonus area (0.30 FAR x 10 acres x 43,560 ft = 130,680 sf of floor area units with TDRs minus 10,000 sf of commercial sf for the TDR baseline). If there is \$64,700 in TDR-feasible profit divided by approximately 120,700 sf of bonus FAR, the resulting value is \$0.54 per bonus sf for TDRs. At 5,000 sf per TDR this equals \$2,700 per 5,000 sf commercial TDR increment.

Depending on where the FAR thresholds are set for a TDR baseline and TDR bonus in the EO area, the \$64,700 in TDR value would be distributed across the amounts of bonus floor area differently, making the TDR value per bonus square foot vary depending on how much bonus is allowed. Table A-2 shows the relationship between the amount of FAR bonus and the TDR values. In column A, a few possible ranges for FAR bonuses are shown that correspond to the TDR implementation strategies discussed above. Column B shows the amount of TDR bonus square feet each strategy would yield. Column C shows the TDR value per bonus square foot, and column D shows the TDR value for each 5,000 sf increment of floor area.



## APPENDIX B: METHODOLOGY, PROTOTYPES, AND REAL ESTATE INPUTS

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The methodology is based on the “residual land value” of a development project. The residual land value calculation is commonly used in the real estate development industry to determine if a developer could profit from purchasing a site and improving it in the manner specified in the analysis. All project costs and revenues (including expected profit) are calculated *except* the cost of the land. Any leftover positive cash-flow is considered “residual” land value.

If the residual land value is more than the actual cost of the land (i.e. residual land value of \$50 per square foot while the land costs \$40 per square foot) the project is feasible and the developer would purchase the land and build the project on it. If the land is more expensive than the residual land value, then the project is worth less than the land acquisition costs and the project is infeasible. The developer would analyze another project or decide not to purchase the land at that time.

The residual land value calculation includes an acceptable profit margin for the developer, yet some projects result in additional profit (i.e. if the residual land value is \$50 per square foot while the land costs \$40 per square foot, the developer would accrue \$10 per square foot in addition to the profit margin already calculated). This profit that is greater than the profit margin is more discretionary than the profit included in the profit margin that is required to continue business. It could be used for research and design, it could be invested in contingencies for other projects or it could be reinvested into the same project to provide more amenities. In this case we assume this profit could be used to purchase Transfer of Development Rights (TDR) bonus units – defined as a unit that makes the gross site residential unit density or commercial floor area ratio higher than the baseline density permitted “by right” under the James City County Code.

The model strives to accurately portray how developers approach the economics of development, and in so doing is broken into three basic sections: development program, project revenues, and projects costs. The variable inputs for each prototype are described in Section 4, Model Inputs by Prototype.

### Development Program

The development program section describes the type and amount of residential units, amount of parking spaces, and building envelope based on the site characteristics. These assumptions were developed based on conversations with the James City County planning staff, comparative analysis of for sale projects, MLS data, and developer, realtor, and broker interviews.

## Project Revenues

The project revenues section calculates the revenues generated with the given unit counts. Comparative analysis of for sale projects, MLS data, and developer, realtor, and broker interviews were used to estimate the lease rates, sale prices and other variables listed for each of the four development prototypes listed below.

## Project Costs

The following standard project costs included in our pro forma model were developed based on working with developers including Olson Development Company, AMCAL, Century Housing, River Bank Development, Comstock Homes, Weyerhaeuser, and Phoenix Group. ULI, RS Means, Dupree, and Scott are additional web data sources. Some costs vary by prototype, and are summarized by prototype number as follows: prototype 1: single-family residential at 1du/3ac; prototype 2: R-2 single family lots; prototype 3: R-5 townhouses; prototype 4: R-5 apartments; prototype 5: business/industrial. Proffer assumptions were provided by the James City County Planning Department. Fixed costs a developer would incur are organized as follows:

- ◆ Pre-development Costs: Land carry, entitlement, professional fees<sup>4</sup>
- ◆ Development Costs: Building and construction, indirect costs
- ◆ Developer Fee: covers costs of developer overhead; 1 percent of revenue for single-family prototypes 1 and 2; 3 percent of revenue for all other prototypes)
- ◆ Contingency: 10 percent of building and construction costs for prototypes 1 and 2; 8 percent in all other prototypes.
- ◆ Marketing Costs: 1 percent for prototypes 1 and 2, 2.5 percent of revenue in all other prototypes.
- ◆ Financing Costs (described below)
- ◆ Commission and Closing Costs: 3 percent of revenue

We assumed building construction cost to be broken into:

### *Hard Costs*

- ◆ Site Development and Landscaping Costs (grading, sewer, water etc): \$5 per square foot (sf) in all prototypes except 1 and 2
- ◆ Parking Costs: \$3,000/space above grade surface parking.

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<sup>4</sup> Includes money paid upfront to hold land through the entitlement process; assumes a 2 year earnest money contract, and professional fees include architectural design, engineering & environmental consultants.

### *Soft Costs*

- ◆ Property Tax: \$0.77 multiplied by land acquisition cost divided by 100
- ◆ Insurance: 1 percent of direct costs for prototypes 1 and 2; 2.4 percent of direct costs for all other prototypes
- ◆ Proffers: Prototype 2, \$21,090 per unit; Prototype 3, \$18,456 per unit; Prototype 4, \$8,009 per unit; Prototype 5, \$24,095 for sewer.

Financing costs – that is, the interest paid to the banks for lent money – is calculated assuming a linear draw on debt with an interest rate that is 1 percent above prime rates. This amounts to a 7 percent interest payment on 50 percent of 65 percent of development and land costs. The remaining 35 percent of costs are assumed to be financed by equity investors. Typical development projects can acquire bank finance up to 75 percent of costs. However, with mixed-use projects, it is harder to secure financing and thus these projects are generally financed with 65 percent bank loans.

## Model Inputs by Prototype

For each prototype studied, this section summarizes specific information regarding the development program revenues and costs.

### *A-1 Single-Family Residential (Outside of PSA)*

#### Development Program

Quantity 100, 2,500 sf, two-story, single-family dwelling units on 3-acre lots. The residential density is based on 3-acre minimum lot size. Also modeled quantity 30, 2,500-square-foot, two-story single-family dwelling units on a 300-acre lot to assess the changes in development right values from a downzone to 10-acre minimum lot size.

#### Revenue

- ◆ Prototype 1-a sale price for a 3-acre lot with 1 unit: \$496,000
- ◆ Prototype 1-b sale price for a 10-acre lot with 1 unit: \$660,000

#### Costs

- ◆ Single-Family Residential Construction Costs: \$100/sf
- ◆ Central Well Fee: \$40,000 per unit
- ◆ Water Hook-Up Fee: \$8,000 per unit
- ◆ Roads: 5 percent of gross site area dedicated to 50 ft width, rural roads (no curbs and drains) at a cost of \$875,532 per mile
- ◆ Land Cost: \$10,000 per acre on 3-acre lots and \$8,000 per acre on 10 acre lots

*R-2 Single Family Residential Cluster Subdivision (inside of PSA)*

Development Program

20 improved subdivided lots clustered on a 5-acre site; 8,700 sf lot size on each parcel. The residential density is two lots per acre without TDR, and four lots per acre with TDR.

Revenue

Selling price for 8,700 sf improved lot, \$75,000

Costs

- ◆ Roads: 10 percent of gross site areas dedicated to 50 ft width urban roads (includes curbs and drains) at a cost of \$1,648,443 per mile
- ◆ Sewer Water: Hook-Up Fee, \$5,262 per unit
- ◆ 1,000 feet of sewer and water main extensions at \$70 per foot; sewer and water in subdivision collection/distribution running under or adjacent to roads: \$140 per foot
- ◆ Land Cost Per Acre: \$25,000

*R-5 Townhome Project*

Development Program

Quantity 40, two-story, 1,400 sf attached townhomes on a 5-acre lot. The residential density is 4 du/ac without TDR and 8 du/ac with TDR.

Revenue

1,400 sf unit sale price: \$399,000.

Costs

- ◆ Multi-Family Residential Construction Costs: \$125/sf
- ◆ Sewer Water Hook-Up Fee: \$4,362 per unit
- ◆ 250 Ft of Sewer/Water Main Extensions: \$70 per foot
- ◆ Land Cost Per Acre: \$43,560

*R-5- Multi-Family Residential Project*

Development Program

112,500 sf, two-story building on a 5-acre lot. Building consists of 60 apartment units. Unit mix includes:

- ◆ 1,000 sf one bedroom units, quantity 15
- ◆ 1,500 sf two and three bedroom units, quantity 45

The residential density is 10 du/ac without TDR and 12 du/ac with TDR.

### Revenue

Monthly lease rates for units as follows:

- ◆ 1,000 sf One-Bedroom Units: \$1,120
- ◆ 1,500 sf Two- and Three-Bedroom Units: \$1,440

### Costs

- ◆ Apartment Construction Costs: \$100 per sf
- ◆ Sewer/Water Hook-Up Costs: \$4,362 per unit
- ◆ Land Cost per Acre: \$43,500

### *Commercial Project in the Economic Opportunity Area Development Program*

Maximum 152,500 sf building footprint on a 10-acre lot, for a 0.35 FAR. Building consists of 122,000 sf of office space, and 30,500 sf of light industrial/flex tech space. The office is in a four-story building, the industrial space is a one-story stand-alone building. FAR ranges from 0.20 without TDR up to 0.35 with TDR. Note that the current EO ordinance does not propose a FAR cap.

Revenue (projected revenue based on historic market trends and time required for the EO areas to be rezoned and developed)<sup>5</sup>

- ◆ Office Monthly Lease Rate (per sf, triple net)<sup>6</sup>: \$2.30
- ◆ Industrial Monthly Lease Rate (per sf, triple net): \$0.75
- ◆ Commercial Vacancy Rate: 5 percent
- ◆ Commercial Capitalization Rate: 8 percent

### Costs

- ◆ Office Space Construction Costs: \$115/sf
- ◆ Industrial Space Construction Costs: \$90/sf
- ◆ Sewer/Water Hook-Up Costs: \$700
- ◆ Land Cost Per Acre: \$54,500 (based on existing industrial land costs, which is in between the current EO-area land price of about \$15,000 per acre and office land costs ranging above \$200,000 per acre)

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<sup>5</sup> Under existing lease rates for prototypical commercial and industrial space, the prototype modeled is not feasible and would not be suitable for any TDR strategy.

<sup>6</sup> Under a triple net lease agreement the tenant is solely responsible for net real estate taxes, insurance, maintenance, and improvements.

## APPENDIX C: GIS SUPPLY AND DEMAND ANALYSIS

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Using GIS software and the Comprehensive Plan designations shown in Figure 1, the following criteria were input to arrive at the sending and receiving areas shown in Figure 2:

1. Selected vacant and redevelopable parcels using Assessor improvement to land value ratios:<sup>7</sup>
  - Vacant =I/L Ratio between 0-0.1
  - Partially developed/developable = I/L ratio 0.1-1.1
  - Developed =I/L ratio greater than 1.1
2. Removed sites owned by local government organizations.
3. Removed PDR, Greenspace and existing and planned subdivision sites.
4. Selected all A-1, R-8 zoning plus EO and Mixed Use designated areas, Stonehouse and the Eastern State Hospital Site.
5. Removed RPA areas from sites selected in number 4.
6. Removed all sending sites under 6 acres in size.
7. Manually adjusted to include/exclude parcels based on Planning Staff input.

Planning staff suggested further analysis of Implementation Strategy 1. Sending and Receiving areas under Strategy 1 were evaluated to conclude that a maximum of 29 percent of the sending sites outside of the PSA could successfully be converted into conservation easements through a TDR program. There are 5,478 potential TDRs in 16,455 acres in the sending area, but only the capacity to absorb 1,547 on 6,801 acres of the receiving sites. The total cost to purchase all of the potential TDRs in the sending area would be \$219.1 million (\$40,000 x 5,478). Based on the estimated bonus unit values and extent of receiving areas, a TDR program could generate \$62.3 million for TDR purchases. The total purchasing potential for each receiving-area prototype is:

- ◆ 6,605 single-family bonus lots could purchase 945 sending-area TDRs for about \$38.2 million.<sup>8</sup>
- ◆ 759 townhome bonus dwelling units could purchase 190 sending-area TDRs for about \$7.6 million.
- ◆ 621 apartment bonus dwelling units could purchase 16 sending area TDRs for about \$600,000.
- ◆ 10.7 million sf of bonus office/industrial floor area could purchase 396 sending-area TDRs for about \$15.9 million.

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<sup>7</sup> This methodology is commonly used to identify infill opportunity parcels to ensure that developed sites are not included in the receiving areas

<sup>8</sup> For the single-family lots that can be developed in Stonehouse the number of bonus lots was adjusted to account for the 3,600 number of units already approved. The analysis calculated two bonus single-family lots, but in Stonehouse it calculated 1.5 bonus lots that would increase the density 2.5 du/ac up to 4 du/ac.

These results are based on the bonus unit and transfer ratios for Implementation Strategy 1, extrapolated on vacant and redevelopable sites in the following areas as described below:

**Low Density Residential Areas:**

Single-family lots at a transfer ratio of seven bonus lots to one sending-area TDR.

**Moderate Density Residential Areas:**

- ◆ 70 percent townhomes at a transfer ratio of four bonus dwelling units to one sending-area TDR,
- ◆ 30 percent apartments at a transfer ratio of 40 bonus dwelling units to one sending-area TDR.

**Mixed-Use Areas:<sup>9</sup>**

- ◆ Between 15 to 30 percent townhomes at a transfer ratio of four bonus dwelling units to one sending-area TDR.
- ◆ Between 5 to 15 percent apartments at a transfer ratio of 40 bonus dwelling units to one sending-area TDR.
- ◆ Between 50 to 100 percent office/industrial at a transfer ratio of 5.5 increments of bonus FAR to one sending-area TDR.

**Economic Opportunity Area:**

- ◆ 85 percent office/industrial at a transfer ratio of 5.5 increments of bonus FAR to one sending-area TDR.
- ◆ 15 percent townhomes at a transfer ratio of four bonus dwelling units to one sending-area TDR.

**Former Eastern State Hospital Site:**

- ◆ 10 percent single-family lots at a transfer ratio of seven bonus lots to one sending-area TDR,
- ◆ 15 percent townhomes at a transfer ratio of four bonus dwelling units to one sending-area TDR,
- ◆ 20 percent apartments at a transfer ratio of 40 bonus dwelling units to one sending-area TDR,
- ◆ 55 percent office/industrial at a transfer ratio of 5.5 increments of bonus FAR to one sending-area TDR.

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<sup>9</sup> Percentages assigned by Planning Staff based on Comprehensive Plan Mixed Use area descriptions. Only undeveloped and underutilized land was included. There may be additional development capacity if the area is redeveloped as a whole.



## MEMORANDUM

**DATE** October 14, 2011  
**TO** Board of Supervisors  
James City County  
**FROM** Bill Fulton, Aaron Engstrom, Rick Pruetz  
**RE** Draft Conclusions and Recommendations

Any Transfer of Development Rights (TDR) program requires important components to succeed. These include:

1. Adequate sending and receiving areas,
2. A strong market for development in receiving areas,
3. Strong financial incentives for both sending-area landowners and receiving-area developers to participate,
4. A clear, easy-to-follow process for landowners and developers.

The recommendations below represent The Planning Center | DC&E's best assessment regarding a program that will be both feasible and successful. The recommendations below include many options. The County may choose any or all of the options listed below.

The biggest issue at this point is reconciling the state's requirement that receiving areas have the capacity to accept all sending-area development rights with the transfer ratios required to make the program successful economically. Options are discussed below. Successfully reconciling these two factors may require geographical modifications to the sending and receiving areas evaluated during this study for the TDR program.

This memo begins with a Summary of Deliverables, followed by Recommendations. DC&E will be present to review these findings at a work session with the Board in October and can answer any questions at that time.

## SUMMARY OF DELIVERABLES

This memorandum is the final of a four-part project. The first three memoranda are briefly described below:

### 1. Successful TDR Program Criteria and Key Issues Memorandum and Presentation to the Board of Supervisors

This memorandum provided profiles of successful TDR programs, distilled criteria for what makes these programs successful, and identified key issues for discussion.

The Board of Supervisors reached the following points of consensus regarding TDR at a work session held December 14, 2010:

- ◆ TDR – Complete the feasibility study in progress
- ◆ PSA – Study reshaping the PSA around the Economic Opportunity area if necessary to optimize receiving areas while protecting environmental sensitive areas.
- ◆ Public Comment – Interview stakeholders and schedule public hearings.
- ◆ Land Owner Expectations – Use TDR as a way to make rural land owners whole in the event of a downzoning from the existing 3-acre zoning.
- ◆ Calculation of Development Rights - In sending areas, calculate development rights based on gross acreage minus RPA only.
- ◆ Receiving Areas - Should include the EO, areas within the PSA suitable for commercial development, and land inside the PSA designated as A-1 and R-8. Also, areas within the PSA that are already zoned for development but that have not been built on.
- ◆ Transfers – should be considered that are both residential unit to residential unit and residential unit to commercial square footage.
- ◆ Development Potential – do not increase the overall net number of residential units permitted in the County.

### 2. TDR Public Forum

The Planning Center | DC&E and the Planning Division held a public forum to present information about the TDR feasibility study and collect input on potential sending and receiving areas and program goals. An overview of TDR programs was presented in a PowerPoint format. This was followed by a break-out work session with posters, a mapping exercise, and exit survey that were used to decide which sending and receiving areas to evaluate in the market analysis (see page 5 of the market analysis for the map).

### 3. TDR Contextual Analysis Memorandum

This memorandum discussed the current James City County policy framework as well as growth management and land conservation tools and how they could be coordinated with a TDR program. Results of the analysis determined that TDR would be a valuable additional growth management tool for the County that would be privately funded. Some specific findings are summarized below:

- ◆ TDR could be used as a complement to PDR, at a lower cost to the county, if landowners are equally or more willing to participate in a TDR program as they are in the PDR program;
- ◆ The green space program strategically conserves land and while this cannot be replicated by a voluntary TDR program, a TDR bank could enhance this program;
- ◆ TDR would not dilute the value of Agricultural and Forestal Districts (AFD) districts, and can be used to permanently protect AFD sites; and
- ◆ If TDRs are allocated to sending sites, Resource Protection Areas (RPA) areas should be excluded from the calculation unless the County wants to provide an additional incentive for landowners to participate.

### 4. TDR Market Analysis and TDR Absorption Capacity

This memorandum evaluated the ability for receiving-area developers to purchase TDRs from A-1 sending areas for \$40,000 each in order to obtain bonus density units in R-2, R-5 zones, and the Economic Opportunity area and determined that TDR would be feasible in single-family subdivisions, townhomes, and office/industrial projects within these zones. Three implementation strategies were outlined, the merits of which are discussed in more detail in the final recommendations of this memo.

As part of this market analysis, we also conducted a GIS-based supply and capacity analysis to determine the supply of development rights in sending areas and the capacity of the receiving areas to absorb that supply. Under Virginia state law, absorption capacity in receiving areas must be at least equal to supply in sending areas.

The GIS analysis revealed that there are 5,478 potential TDRs on 16,455 acres in the recommended sending area.

However, in the recommended receiving area, there is capacity to absorb only 1,547 of these development rights under Strategy 1 listed below, which we believe to be the most politically feasible alternative strategy based on the Board guidance discussed on page 2. This does not mean that only 1,547 units (or FAR equivalents) would be built through TDR compliance in the receiving areas, which total 6,801 acres. In fact, due to the high transfer ratios between sending and receiving areas, approximately 8,000 bonus dwelling units and 10.7 million square feet of office/industrial floor area could be constructed with TDRs if all available sending units are transferred. Under strategy 1, the buildout/recommended densities would still fall within the recommendations of the 2009

Comprehensive Plan designations. Again, the high-transfer ratios between sending and receiving areas are due to high property values in the sending areas.

## RECOMMENDATIONS

Based on the TDR Market Analysis for James City County we conclude that a TDR program could be feasible and meet the four successful TDR factors if certain changes are made to the zoning ordinance and sending and receiving areas. Following are DC&E's recommendations for James City County to craft a successful TDR program:

### 1. Currency

The basic currency used in the TDR Program should be the "TDR Certificate." TDR Certificates should be issued by James City County to sending-area landowners after a verification process. A TDR Certificate will specify the number of development rights the sending-area landowner holds. The Certificate may be sold to any purchaser, but may only be redeemed by receiving-area developers for the bonus densities described below.

### 2. Sending-Area Implementation Strategies

For sending-area landowners, the James City County TDR Program could be implemented in one of two different ways:

#### ***Sending-Area Implementation Strategy 1: Permit landowners to exercise all development rights on-site or sell them in the TDR program.***

Under this option, sending-area developers would have the right to either exercise all their development rights on their property or sell all or some of their rights in the TDR program. For example, a landowner who possesses 30 acres of property zoned at one unit to 3 acres (1 un/3 ac) would have ten development rights. He or she could build ten units on-site; sell ten development rights in the TDR program; or choose any combination of the two. This could result in a partial sale of development rights with some development still occurring on the property at 3 acre lot sizes.

#### ***Sending Area Implementation Strategy 2: Cap on-site density below current zoning***

Under this option, which is borrowed from the system in Montgomery County, Maryland, sending-area landowners would be subject to a cap on on-site density below the current zoning, but would be able to sell the rest of their development rights in the TDR program. For example, in Montgomery County, a

landowner who possesses 50 acres of property zoned at 1 un/5 ac might be able to build two units on-site (1 un/25 ac) and sell the remaining eight development rights in the TDR program.<sup>1</sup>

Strategy 1 would give sending-area landowners more options, by permitting them to exercise their development rights on-site or selling them. However, Strategy 2 would provide landowners with a much stronger incentive to participate in the TDR program.

### 3. Receiving-Area Implementation Strategies

As noted in the market analysis, we have identified three possible implementation strategies for the receiving areas. Each has its own set of pros and cons, and could be singularly implemented to initiate a successful TDR program. These are discussed below.

In addition, the County could consider a full or partial proffer waiver to strengthen the economic incentives of these strategies to participating landowners. This would only be valid in circumstances where a rezoning would be required.

The County could also use these strategies in combination with one another. For example, the County could create a two-tier TDR system combining Strategies 1 and 2, requiring TDRs to achieve each tier. A full or partial waiver of proffers could be used the same way, allowing receiving-area developers to replace or supplement proffers with TDRs under Strategy 1 or 2 or both if a tiered system is created.

#### ***Receiving Area Implementation Strategy 1: Require developers to provide TDRs to obtain maximum density currently permitted.***

Under this option, receiving-area developers could obtain a portion of the density permitted under current zoning through normal processes, but use TDRs to obtain to maximum density permitted. This approach would permit the County to craft a program without increasing overall densities or the overall Comprehensive Plan buildout/recommended densities, but it would require developers to meet an additional requirement to obtain maximum density permitted in the zoning ordinance.

In residential zones, this approach can be accommodated within current density limits. In the Economic Opportunity zone, this approach would require the County to place a numerical limit on floor-area ratio. Currently the impervious surface requirements of the Chesapeake Bay ordinance paired with the surface parking needs of uses serve as a de-facto limit on a parcel-by-parcel basis, but this is frequently overcome through master planning larger development areas (such as New Town).

In order to make the following recommendations for TDR densities, development prototypes modeled were chosen based on typical development types, densities, and market demand seen in James City

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<sup>1</sup> An unintended consequence of allowing 25-acre sites to retain the right to build one unit in Montgomery County was that the strong market demand resulted in development of large estates, which did not conform to the County's vision for the intended land use in the sending areas.

County. The situations below represent a portion of the districts that would require amending to incorporate a TDR program (such as Mixed Use). Additionally, if a TDR program is pursued, the maximum permitted FAR with bonus square footage discussed for the commercial prototype may need to be amended to go above 0.30 to accommodate the FARs recommended in the Comprehensive Plan<sup>2</sup>. Planning staff's cover memo further discusses these considerations and the relationship between TDR and the currently proposed residential ordinance changes.

*In the R-2 Cluster (Single-Family) Zone*

Base Density        2 units/acre  
Density with TDRS  4 units/acre

*In the R-5 Zone (Townhomes Only)*

Base Density        6 units/acre  
Density with TDRs  8 units/acre

*In The R-5 Zone (Multi-Family Residential Only)*

We do not recommend including multi-family residential projects in the R-5 zone in the TDR program at this time because the value of bonus density is low and transfer ratios are high.

*Office/Industrial Districts in the Economic Opportunity Zone*

Base FAR            0.2  
FAR with TDRs    0.3

As stated above, there is currently no FAR limit in commercial/industrial zones. However, the combination of parking requirements and impervious surface requirements creates a default FAR limit of approximately 0.3 and most recent projects have been constructed in the 0.2-0.3 range. Again, higher FARs can be achieved if a larger area is master planned, which is the current recommendation for the EO area.

***Receiving-Area Implementation Strategy 2: Require developers to provide TDRs to obtain bonus densities beyond currently permitted maximum.***

Under this option, receiving-area developers could use TDRs to obtain bonus units or bonus FAR above what the zoning designation currently permits. This approach would give developers significant incentive to participate in the TDR program, but only if there is sufficient demand for higher densities in the receiving area.

However, this option would require the County to consider increasing the overall buildout and recommended densities in the Comprehensive Plan to accommodate the bonus densities.

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<sup>2</sup> For example, the Community Commercial designation recommends a maximum of 0.4 FAR while Limited Industry and General Industry do not recommend having a maximum.

If the County chooses to pursue this option, we make the following recommendations regarding maximum densities in the example zoning districts that were analyzed:

*In the R-2 Cluster Zone (Single-Family)*

Base Density	4 units/acre
Density with TDRs	5 or more units/acre

*In the R-5 Zone (Townhomes Only)*

Base Density	8 units/acre
Density with TDRs	10 or more units/acre

The density with TDRs is similar to densities permitted under the existing cluster program, which permits densities to increase to 9.6 units per acre.

*In the EO (Commercial/Industrial)*

Base Density	0.3 FAR
Density with TDRs	0.35 or higher FAR

As stated above, increasing residential densities above the baseline may require changes to the Comprehensive Plan. However, our financial analysis indicated that providing bonus FAR above 0.3 in the EO will require that the entire area be master planned. This could be patterned after the New Town plan, which permitted impervious surface limitations to be implemented across the entire area, rather than the parcel level. If a parcel-by-parcel solution is necessary for commercial transfers, it might require creating a credit system for impervious surface so developers can exceed the impervious surface limitation on-site and gain credit for pervious surface saved in the sending area through TDRs. This option should be carefully considered however because the program should strive to keep impervious cover consistent across each watershed. Also, the geographic areas where development is encouraged inside the PSA are often in the watersheds that are most sensitive to increased impervious cover.

It should be noted that EO projects could meet the impervious surface requirements and accommodate bonus FAR if subterranean parking were included. However, subterranean parking is currently financially impractical based on developer interviews and market conditions so our financial analysis assumed the use of surface parking.

***Receiving Area Implementation Strategy 3: Incorporate a TDR option into the rezoning process.***

Under this option, TDRs would be required or encouraged for a rezoning in the receiving areas – for example, from A-1 or R-8 to R-2 or R-5. As with Strategy 1, this approach would permit the County to craft a program without increasing overall densities as designated by the Comprehensive Plan or the overall Comprehensive Plan buildout/recommended densities, but it would require developers to meet an additional requirement to obtain maximum density permitted in the zoning ordinance.

This option would surely generate significant demand from TDRs. However, a *requirement* to use TDRs in a rezoning is not permissible under the current state law.

Thus, a TDR compliance option that is either a cash in-lieu proffer or a TDR certificate could be included in the County's proffer guidelines. This would have the effect of increasing the overall amount of proffers unless the County was to eliminate a different proffer of equal value from the guidelines.

Alternatively, the County could seek legislative change to explicitly permit that TDRs can be required in a rezoning situation.

#### *Waiver or Reduction of Proffers*

In implementing the strategies above, the County could choose to waive proffer guidelines on bonus units/density above the baseline if TDRs are used. Proffers for baseline density would still be used. We did not conduct a financial analysis on this option, but the cost of proffers is roughly half of the cost of purchasing one TDR. Thus, it is clear that waiver of proffers would create a powerful economic incentive for receiving-area landowners to use TDRs to obtain bonus density. This method would be a trade-off as it would conserve the sending areas but reduce private funding of services and infrastructure.

Creative solutions should be explored to leverage proffer reductions through tax increment financing (TIF). The Washington State legislator recently passed a "TDR for TIF" bill that allows counties to sell bonds for infrastructure improvements in receiving areas.<sup>3</sup>

#### 4. Transfer Ratios and Calibration of Sending- and Receiving-Area Capacity

As explained in the market analysis memo, a transfer ratio is the ratio between one TDR from the sending area and bonus density in the receiving area. Transfer ratios are established to calibrate sending- and receiving-area values. For example, if a sending-area TDR is valued at \$30,000 and one bonus dwelling unit in a receiving area is valued at \$10,000, then the transfer ratio would be established at 3:1. This would mean that one TDR purchased from the sending area would be redeemed for 3 bonus units in the receiving area.

Such transfer ratios are common in TDR programs because of the differences in property value between sending and receiving areas. However, transfer ratios can make it more difficult to comply with Virginia Code Section 15.2-2316.2(B)(10), which states: "The development rights permitted to be attached in the receiving areas shall be equal to or greater than the development rights permitted to be severed from the sending areas". The model TDR ordinance subsequently prepared by a state task force includes language requiring the receiving area to have the capacity to absorb the number of

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<sup>3</sup> A summary of ESSB 5253, the "TDR for TIF" legislation can be found at <http://www.foster.com/pdf/ESSB5253-Combines-TDR-and-TIF.pdf>

sending-area development rights and allow for bonus transfer ratios.<sup>4</sup> We will discuss options for calibrating capacity and absorption below. Draft sending and receiving areas are shown on a map on page 5 of the market analysis. These were put together based on previous guidance from the Board and input from the public forum, but will need to be adjusted and reevaluated if the Board decides to pursue a TDR program.

The transfer ratios recommended below perform two functions:

- ◆ They increase the economic incentive for both sending- and receiving-area landowners to participate.
- ◆ They can be used to calibrate the sending and receiving-area geographies to permit the County to comply with the state law.

For the purpose of this chart, the bonus FAR unit in the EO area is equivalent to 5,000 square feet. Thus, for example, under Strategy 1, one TDR in the EO area could be redeemed for 27,500 square feet of space (5.5 x 5,000).

Based on the economic analysis, we recommend that the County establish the following transfer ratios for the implementation strategies used.

We are not recommending that R-5 multi-family residential participate in the program at this time.

<u>Zone Description</u>	<u>Transfer Ratio</u> (Receiving-area units/sending area unit)
<i>Strategy 1 (Maximizing Current Density)</i>	
R-2 Cluster Zone	7:1
R-5 Zone	4:1
EO	5.5:1
<i>Strategy 2 (Exceeding Current Density)</i>	
R-2 Cluster Zone	3.5:1
R-5 Zone	4:1
EO	2.7:1
<i>Strategy 3 (Rezoning)</i>	
R-2 Cluster Zone	12.5:1
R-5 Zone	15:1
EO	14.5:1

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<sup>4</sup> Section 5.G refers to Virginia Code Section 15.2-2316.2 (B)(10).

As stated above, the recommended sending areas contain approximately 5,500 TDRs. However, using the recommended transfer ratios and implementing Strategy 1 only, approximately about 1,500 TDRs could be absorbed in the sending areas because the transfer ratios are so high. This would not appear to conform to state law. The County has several options and could mix and match among those options. These options include:

1. Pair together strategies 1 and 2 or strategies 2 and 3. These would increase the TDR compliance threshold to include both low and high project densities.
2. Reduce the size of the sending area eligible for the program so that only 1,500 TDRs are in play rather than 5,500. This would obviously require prioritization of sending areas or over a 60 percent reduction in the sending-area size.<sup>5</sup>
3. Increase the size of the receiving area to increase the absorption capacity, although an approximately 6,500 additional acres of receiving area would be required to absorb all 5,500 TDRs that could potentially be transferred from sending areas at the identified ratios.
4. Downzone sending area properties and use the densities in the new zoning for the transfer ratio so that sending-area landowners have fewer development rights (i.e. land is downzoned to 1 unit per 10 acres and landowners can transfer development rights at 1 unit per 10 acres).
5. Find a way to lower the transfer ratios and still maintain an economically viable program. Transfer ratios can be lowered if receiving-area developers have more project profit with which to buy TDRs. The most obvious ways for the County to lower the transfer ratios would be to waive or reduce proffers on receiving-area project in the short term and revisit the ratios when new construction rates and new product sale prices increase in the future.

For example, if \$20,000 in proffers was waived for a Townhome unit that can already incur a cost of \$10,000 per TDR, there would be about \$30,000 available for TDR compliance. Then the transfer ratio would be 1.3 receiving units for one sending unit worth \$40,000

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<sup>5</sup> Frederick County's TDR program set the transfer ratios based on sending-area land use conservation priorities rather than a market analysis. For example a TDR from a designated Agricultural and Forestal District is worth two receiving-area bonus units while a TDR from non-priority sending-area land is worth only one receiving area unit. James City County could set lower transfer ratios for non-priority sending areas, thus increasing developer incentive to purchase TDRs from sending areas with the highest transfer ratios. If the lower non-priority transfer ratios are set below the ratios recommended by the market analysis, this could help balance sending and receiving areas.



## 5. Cash In-lieu

We recommend that receiving-area developers be given the option of paying a cash in-lieu instead of obtaining TDR certificates in the open market. This is not permitted under the state TDR law, but it could be considered a TDR proffer for rezoning if TDR implementation strategy 3 is used. The upside to this option is it ensures that developers can use TDRs even if there is a short supply of willing sellers. The downside is the potential for reduced purchasing power if the fees stagnate in a fund while sending-area TDR prices increase.

We recommend that this TDR compliance option be set initially as the approximate “willingness to pay” of receiving-area developers and then be adjusted each year by the County based on market activity the previous year.

Based on the economic analysis, we recommend that the County establish the following cash in-lieu per bonus unit (or bonus FAR unit of 5,000 square feet in the EO) for the implementation strategies used. These amounts are derived from the same economic analysis as the transfer ratios.

We are not recommending that R-5 multi-family residential participate in the program at this time.

<u>Zone Description</u>	<u>Cash in-lieu amount for TDR compliance for 1 receiving-area unit</u>
<i>Strategy 1 (Maximizing Current Density)</i>	
R-2 Zone	\$5,000
R-5 Zone	\$10,000
EO	\$7,000
 <i>Strategy 2 (Exceeding Current Density)</i>	
R-2 Zone	\$10,000
R-5 Zone	\$10,000
EO	\$15,000
 <i>Strategy 3 (Rezoning)</i>	
R-2 Zone	\$3,000
R-5 Zone	\$3,000
EO	\$2,500

## 6. Market Transaction Options

Based on the economic analysis and the above discussion of transfer ratios and cash in-lieu fees, we recommend that sending-area landowners and receiving-area developers be given two market transaction options: private transactions and bank transactions.

### *Private Transactions*

Sending-area landowners and receiving-area developers are always free to engage in private transactions to buy and sell TDR Certificates. One TDR from the sending area may be redeemed for bonus units in the receiving area according to the transfer ratios listed above.

Third parties may also buy, hold, and sell TDR Certificates.

### *Bank Transactions*

If the County chooses to create a cash in-lieu or fund TDR purchases with any source of public funds, this will create a pool of funds available to purchase TDRs from sending-area landowners, hold them, and sell them to receiving-area developers. This will require the County to either serve as or designate an entity to engage in these transactions – essentially, a TDR bank. Such a banking role is advantageous in two ways: It creates an entity that can smooth out ups and downs in the TDR market and it creates, in effect, a revolving fund to purchase more TDRs. However, to be effective, the TDR bank must function nimbly as an active market player that buys and sells TDRs—this skill set, particularly TDR sales, may not be easy to find in County staff or local non-profits.

If a TDR bank is created, sending-area landowners and receiving-area developers will have the option of conducting transactions with the bank.

## 7. Program Administration

A TDR Program includes several administrative functions, if the County decides to proceed, it should be very clear as to which entities perform each function. These functions include;

### *Verification of Development Rights and Issuance of TDR Certificates*

For a TDR market to operate successfully, sending-area landowners must have a way to verify their development rights and receive TDR Certificates that can be bought and sold. As the land-use regulating entity, the County's Planning Division should perform this function. The function can be funded through a small fee for issuance of certificates and/or a small fee on each TDR transaction.

### *Information Clearinghouse*

Like participants in any market, TDR market participants need access to accurate and up-to-date market information, including details (including sale price) of transactions, as well as a registry of potential buyers and sellers. Maintaining this information online is a relatively simple task that can be performed by County Planning. Time and resources are required to setup the clearinghouse, but minimal effort is required to update it, depending on the number of transactions. A small ministerial fee can be placed on transfers to fund this operation.

### *Banking Function*

If the County creates an in-lieu option, or chooses to provide public funds from other sources toward TDR transactions, a banking function is created and therefore a banking entity must be created, which is authorized to engage in transactions using these public funds. This function could be performed by the County, which already operates a Purchase of Development Rights program; or by a designated nonprofit entity, such as the Williamsburg Land Conservancy, which also purchases development rights. One possibility would be to combine the banking function with the PDR program so that PDR funds could be used in the TDR Program to create a revolving fund.

### *Holding of Conservation Easements*

Once development rights are severed from the sending-area land, a conservation easement must be placed on that land restricting future development. This easement could be held either by the County or the Williamsburg Land Conservancy, both of whom currently hold similar easements.

## **CONCLUSION**

Based on the TDR Market Analysis for James City County we conclude that a TDR program could be feasible and meet the four successful TDR factors in the following ways if changes are made to zoning, sending and receiving areas, and potentially legislation:

### **1. Adequate sending and receiving areas**

If the County chooses not to add a proffer for TDRs, or amend the recommended Comprehensive Plan densities, there will be insufficient capacity for the receiving areas to absorb all 5,500 sending-area TDRs with the market-based transfer ratios. Sending-area oversupply is a common occurrence in TDR programs, but in this case, the state TDR law requires the sending area size in this study to be smaller or prioritized given the receiving areas evaluated. Despite the initial imbalance, this criteria can be met by pursuing the recommendations on page 10.

### **2. A strong market for development in receiving areas**

James City County will continue to have demand for growth and new development within the PSA. The challenge is whether the County chooses to evolve to accommodate new housing and commercial space that efficiently uses the remaining undeveloped land. If so, an increasingly more compact urban fabric is well suited to promulgate demand for TDRs that conserve areas outside of the PSA.

### **3. Strong financial incentives for both sending-area landowners and receiving-area developers to participate**

The transfer ratios contained in this study are high, but they are designed to create strong incentives to transfer TDRs. Furthermore, if TDRs are required to obtain the maximum density already allowed or if they are proffered for rezoning, there would be a high level of TDR compliance for development projects that have historically proven to be successful in the receiving areas.

#### 4. A clear, easy-to-follow process for landowners and developers.

This success factor relies on how the TDR program is administered and integrated into the development approval process. The TDR certificate allocation procedure for sending-area landowners should not be burdensome in terms of costs and requirements. Developers cited the desire for TDRs to increase the level of certainty that a project will be approved. If TDRs can be used to facilitate the development process in receiving areas by streamlining administrative approval or reducing proffers, TDRs would be embraced by developers.<sup>6</sup>

Before a TDR program is developed, a preferred Implementation Strategy needs to be selected, the administrative framework needs to be setup and address staffing support, receiving-area neighborhood stakeholders need outreach, and developer compliance needs to be assured. The following section addresses some of these key decision points in more detail.

### DECISION POINTS FOR BOARD OF SUPERVISORS

1. *Does the James City County Board of Supervisors elect to move forward with TDR program implementation?*

- ◆ **Pro:** This analysis determined that this market-based conservation tool is feasible.
- ◆ **Con:** This analysis determined that the TDR market is weak, resulting in high transfer ratios that may only conserve approximately a maximum of 30 percent of the selected sending areas and require a series of complex decisions to implement the receiving-area framework.

2. *How should the discrepancy between sending-area supply and receiving-area capacity be reconciled?*

Under Strategy 1, only 1,500 of the 5,500 TDRs in the sending area could be absorbed in the receiving area. Several options for reconciling this discrepancy are listed above. They include:

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<sup>6</sup> The options evaluated in the market analysis did not include a streamlined approval process or reduced proffers.

*A. Pair strategies 1 and 2 to implement the TDR program, or strategies 2 and 3.*

- ◆ **Pro:** The capacity of receiving areas to absorb sending-area TDRs will be greatly increased because TDR compliance would occur at low and high project densities, which would also have the benefit of creating more potential participants in the TDR market.
- ◆ **Con:** As stated above, Strategy 2 would require policy changes in the Comprehensive Plan and would increase the overall number of units that could be built in the County; Strategy 3 would increase the cost of development unless state law could be changed to require TDR rather than having it remain a voluntary program.

*B. Reduce the size of the sending area eligible for the program*

- ◆ **Pro:** The sending area supply could be reduced to equal the receiving area capacity, such as selected receiving areas around Forge Road. This would result in a more concentrated area of preserved land (as opposed to having a larger sending area where preservation would be scattered due to the voluntary nature of the program).
- ◆ **Con:** The County would have to make politically difficult decisions about which sending areas to include and which to exclude; and the overall amount of land conserved might decline.

*C. Increase the number of receiving areas to increase the absorption capacity.*

- ◆ **Pro:** The sending area supply would equal the receiving area capacity.
- ◆ **Con:** It would be difficult for the County to identify enough viable receiving areas given the current market and development conditions; land and infrastructure constraints; and citizen feedback.

*D. Downzone sending area properties so that sending-area landowners have fewer development rights and allow transfers at the densities in the new zoning.*

- ◆ **Pro:** The sending area supply could equal the receiving area capacity depending on the revised zoning requirements.
- ◆ **Con:** Downzoning rural areas could meet considerable resistance from property owners.

*E. Lower transfer ratios by waiving or reducing proffers on receiving-area projects.*

- ◆ **Pro:** More developer revenue in receiving areas would be freed up to pay for TDRs.

- ◆ **Con:** Receiving areas may not obtain as many public benefits as they typically do under the proffer system. Can only be implemented when a rezoning is required. May shift more of the burden of paying for the TDR program away from the private sector and towards the public sector unless innovative alternative funding strategies such as a TIF are pursued.

### 3. *Should the EO be a TDR Receiving Area?*

TDRs are purchased in receiving areas when there is demand for higher densities or more FAR. The EO area is not currently zoned for economic development. When it is rezoned, TDR and FAR provisions could be included in the EO ordinance, but these provisions would have to be designed to catalyze demand for TDRs.

- ◆ **Pro:** Including provisions in the EO ordinance for TDRs will increase demand for TDRs and offset the fact that the project would remove farmland. Including the EO also makes it easier to meet the state requirement that supply equal absorption capacity.
- ◆ **Con:** TDRs would increase the cost of developing in the EO area and would necessitate a FAR cap, which is not currently included in the adopted EO ordinance. This may conflict with the Comprehensive Plan goals of making development within the EO area procedurally easy and may not have the intended effect to promote development in this area unless additional incentives are provided, such as reduced impervious surface requirements or processing TDR transfers administratively rather than legislatively.

### 4. *Which Receiving Area Implementation Strategy should be selected?*

Three implementation strategies were evaluated in the market analysis. All of them have positive and negative implication for TDR program success.

#### *Strategy 1 (Maximizing Current Density)*

- ◆ **Pro:** This strategy could be implemented under the Comprehensive Plan without an increase in buildout/recommended densities and would increase sending-area landowner motivation to participate in the TDR program, as TDRs would be required to maximize existing density. Less likely to result in a County-wide increase in development potential.
- ◆ **Con:** This strategy involves a cap on onsite development below current densities, which could be interpreted by some landowners as a downzoning.

#### *Strategy 2 (Exceeding Current Density)*

- ◆ **Pro:** This strategy would take advantage of the fact that there is a demand for incremental increases in current commercial densities that could be accommodated in areas where there is some excess infrastructure capacity. It would also make it easier for the County to meet the state requirement that supply equal absorption capacity.
- ◆ **Con:** This strategy could require the County to revisit the buildout/recommended densities contained in the Comprehensive Plan. May have unintended effects on infrastructure, would

result in an overall increase in units in the County, may not get used since developers rarely request maximum residential densities that are already permitted, and may meet with opposition from landowners adjacent to receiving areas.

### *Strategy 3 (Rezoning)*

- ◆ **Pro:** This strategy would generate the most demand for TDRs and it could be implemented under the Comprehensive Plan without an increase in buildout/recommended densities. It would also make it easier for the County to meet the state requirement that supply equal absorption capacity.
- ◆ **Con:** As a *requirement*, this strategy is not allowed under the State TDR law; and it would increase the cost of rezoning.

### *5. Should Proffers Be Waived or Reduced to Accommodate TDRs?*

Proffers provide essential support for schools, roads and other community services. However, it might be possible to waive or reduce proffers for TDR participants, or else include TDRs in the proffer guidelines.

- ◆ **Pro:** Relief from some or all proffers would conserve more sending area based on the same amount of receiving area because lower transfer ratios can be used (i.e. 1 sending area right would equal fewer receiving area bonus units). Proffer waivers would be a strong incentive for receiving areas developers to participate in the TDR program. A waiver or reduction of proffers would also allow the County to lower transfer ratios, thus helping to close the gap between sending-area supply and receiving-area absorption capacity.
- ◆ **Con:** Proffer relief would essentially divert funding from traditional proffer beneficiaries (roads, sewers, etc.) to the TDR program. Can only be implemented when a rezoning is required. May shift more of the burden of paying for the TDR program away from the private sector and towards the public sector.

### *6. Which transfer options should be allowed?*

Direct buyer-seller exchange, TDR banks, and a cash-in lieu are the instruments of TDR transactions.

- ◆ **Pro:** Multiple transfer options will stimulate TDR market activity. If private transactions are slow due to buyer-seller timing issues, TDR banks and in-lieu funds can smoothen out the number of market transactions.
- ◆ **Con:** A TDR bank and cash in-lieu would increase the TDR program's administrative cost. A bank is not likely to be successful unless it is staked with considerable up-front funding. Cash in-lieu could require a legislative change unless it is only included in the proffer guidelines for rezoning.

### **Attachment 3: Technical Discussion of TDR, Ordinance Amendments and Development Procedures**

The recommendations in DC&E's memo are based on an analysis of typical development types and intensities that are most common in James City County. While specific zoning districts (R-2 Cluster, R-5, and Economic Opportunity (EO)) are referenced for the purposes of the analysis, other districts (such as Mixed Use) could potentially be amended to allow TDR. Staff was requested to provide development prototypes that represented common intensities. As a result, the prototypes may not exactly match current ordinance requirements or recommended Comprehensive Plan densities. If the Board opts to pursue a TDR program, DC&E's recommended TDR densities, the County's current ordinances, and Comprehensive Plan densities will have to be calibrated. Depending on the TDR program strategy, the prototypes modeled may also necessitate changes to residential and commercial ordinances that are currently being amended through the Subdivision and Zoning Ordinance Update. Following is a more specific discussion of how a TDR program could potentially fit into the proposed ordinances to give the Board a better idea of considerations and changes that may need to be made to make TDR more feasible. Although these applications have been considered by staff, there may be alternative ways to incorporate TDR into the County's ordinances.

#### *Commercial*

As noted in DC&E's final recommendations, the County would have to establish floor area ratio (FAR) maximums for any commercial receiving areas (such as EO) in order to implement a TDR program that allows residential units to be converted into commercial square footage. FAR maximums are necessary to set a baseline for allowed square footage without TDR, and then a bonus amount of square footage if TDR is used. DC&E's analysis uses typical FARs in the County since there are no current FAR requirements in the zoning districts DC&E evaluated. If a TDR program is pursued, the initial FAR figures will need to be adjusted to match the recommended FAR caps in the Comprehensive Plan which range from 0.2 to 0.4 or higher. When setting these caps, the Board will have to consider ratios that do not substantially suppress by-right commercial development but are also low enough that developers will want to seek higher FARs through TDR purchases. For example, typical commercial development ranges from 0.2 to 0.3 FAR. Developers would not be as likely to request TDRs if the maximum FAR in a district is set to 0.4 with the possibility of going to 0.5 with TDR since they rarely reach the maximum FAR.

#### *Residential*

Unlike commercial districts, residential districts already have density ranges and maximums in the ordinance. The prototypes modeled in the feasibility study assumed that a legislative process would be required to achieve higher densities through TDR. The analysis looked at development in R-2 Cluster and R-5 ordinances. Revisions to each of these districts were presented to the Board at a work session on September 27. Both proposed ordinances include a structure for obtaining bonus density through obtaining a rezoning and/or a special use permit into which TDR could be incorporated. The following example outlines one scenario under DC&E's proposed implementation strategy 1 which would require developers to provide TDRs to obtain the maximum density currently recommended by the Comprehensive Plan. If the Board decides to pursue a TDR program, specific implementation of the strategy can be discussed within other zoning districts, including R-5, Mixed Use, or PUD.

For the R-2 Cluster model based on proposed ordinance revisions, a developer can develop at 1 dwelling unit/acre (du/ac) by-right and can increase up to 4 du/ac by gaining points through providing items from a menu that includes design features, environmental protection, access to public transportation, affordable housing units, etc. The feasibility study modeled requiring a developer to provide design features off the menu of items to increase from 1 du/ac to 2 du/ac and then allowing a developer to choose TDR off the menu of options to increase beyond 2 du/ac. If this scenario is incorporated into the proposed ordinances for cluster, TDR could be one option out of 16 for acquiring additional density, which does not create a

strong incentive for a developer to use TDR. As an alternative, the ordinance could be restructured to reduce the other options available for increasing densities beyond 2 du/ac.

The basic question for residential development is how the County values the use of TDR versus the application of design criteria to obtain density bonuses. Staff has identified four ways that residential densities could be restructured to be tiered based on where priorities are set on a continuum. Again, these are not all-inclusive and there may be alternative ways but these are options staff has developed based on the market analysis and current structure of the County's ordinances.

1. Require application of the design criteria first to obtain density bonuses and then allow subsequent density bonuses through either TDR or additional design criteria depending on what the developer wants to do (such as how the R-2 Cluster prototype is described above); or
2. Require application of the design criteria first to obtain density bonuses and then allow subsequent density bonuses through TDR only (the R-2 Cluster prototype can be set up this way as well if desired); or
3. Require either application of the design criteria or TDR to obtain any density bonuses based on the developer's preference; or
4. Require use of TDR for any density bonus first and then allow subsequent density bonuses through application of the design criteria.

#### *Proffer Considerations*

DC&E also discusses other incentives that could encourage the use of TDR. One example was to waive proffer payments on any units acquired as a result of a transfer. This could structurally operate in two ways:

1. When a property is rezoned, the applicant proposes TDRs to acquire density bonuses. In this case, the Board and the public would be fully aware of the overall density. The Board could then opt to waive any cash proffers on the transferred units, similar to what is often practiced for affordable housing.
2. When a property is rezoned, the applicant applies for a base density and voluntarily contributes proffers for those units. Once the rezoning is approved, the applicant can then elect to acquire TDRs to reach a higher density on-site by-right. At that point, proffers would not be collected for the transferred units.

## **Attachment 4: Summary of Options for Next Steps**

### *Option 1: Pursue a TDR program*

1. Decide on a strategy and structure for implementing TDR. DC&E has provided 3 potential implementation strategies for the Board to consider, each requiring different steps.
2. Pursue legislative amendments depending on the selected strategy.
3. Revisit sending and receiving area map to further refine and prioritize areas. This would also include an evaluation of infrastructure to verify whether there is enough capacity to accommodate additional transferred units and adjusting areas to ensure that the receiving area is big enough to accommodate the units that could be generated from sending areas as required by the TDR enabling legislation.
4. Depending on the strategy, recommended densities within the Comprehensive Plan may need to be reevaluated and amended.
5. Revisit draft ordinances for residential districts that could be potential receiving areas and evaluate changes to sending area ordinances if the Board opts to pursue increasing the sending area minimum lot size.
6. Revisit adopted commercial and economic opportunity districts to set floor area ratio maximums and incorporate TDR if the Board decides to allow residential units to be converted to commercial square footage.
7. Develop any ordinances specifically related to TDR to address procedural and submittal requirements.
8. Once TDR has been integrated into the necessary ordinances, evaluate broader residential and commercial changes to the A-1 and R-8 ordinances in accordance with recommendations from the 2009 Comprehensive Plan (see considerations under Option 2).

### *Option 2: Do not pursue a TDR program*

1. Determine how amendments to the rural zoning districts should proceed. Considerations include:
  - a. Does the Board want to develop and adopt a methodology and timeline specific to these amendments?
  - b. Does the Board wish to pursue any additional studies or formation of a new committee? If so, what kind of study/information is requested?
2. Process amendments to the residential portions of rural lands ordinances and determine how previous work done on the ordinances in 2006 should be handled. Some potential options that were discussed at the Board's December 14, 2010 work session include:
  - a. Finalize the draft narrative ordinance with the intent of incorporating it into the zoning and subdivision ordinances.
  - b. Continue work on the draft narrative ordinance, keeping the four development options, but consider making minor changes to water or sewer requirements, procedures, open space requirements, etc.
  - c. Begin with the Rural Lands Steering Committee recommendations and draft a new narrative ordinance with changes. Changes may include re-evaluating and changing the four development options or developing new options.
  - d. Begin the ordinance update from scratch based on guidance from the 2009 Comprehensive Plan. This may involve soliciting new public input, developing new guiding principles and recommendations, potentially hiring a consultant, and possibly increasing the budget for this component of the ordinance update scope.
3. Process amendments to the non-residential portions of rural lands ordinances in conjunction with residential amendments.



# Transfer of Development Rights

Board of Supervisors Work Session

October 25, 2011

# 5 Challenges of TDR into James City County

2



**Rural land can be protected and the owner can still realize its financial value.**

**Land targeted for growth can be creatively developed by using shifted development rights.**

# TDR in JCC

3

## 1. Implementation Strategy #3

- ❑ Not currently legal
- ❑ Can't *require* anything of a rezoning
- ❑ TDR must be voluntary per legislation



# TDR in JCC

4

## 2. High transfer ratios

- ❑ No net increase in units
- ❑ Ratio of 1:1 is not marketable
- ❑ Need incentives
- ❑ Downzonings or Comp Plan amendments may be necessary



# TDR in JCC

5

## 3. Proffer waivers

- ❑ Free up developer profit bringing transfer ratio closer to 1:1
- ❑ Provides incentive
- ❑ Shifts cost of TDR from private to public



# TDR in JCC

6

## 4. Floor area ratios (FAR)

- ❑ Necessary for conversions to commercial square footage
- ❑ Not currently in ordinances
- ❑ Set ratios carefully
  - Don't substantially suppress by-right commercial development
  - Low enough developers will want to seek higher FARs



# TDR in JCC

7

## 5. Sending – receiving area imbalance

- ▣ State enabling legislation
- ▣ Reduce/prioritize sending area
- ▣ Expand receiving area
- ▣ Change transfer ratios



# Decision Points

8

1. Does the Board wish to pursue a TDR program and any associated legislative and ordinance amendments necessary to enact the program?



# Decision Points

9

2. How should staff proceed with larger residential and non-residential Rural Lands updates?



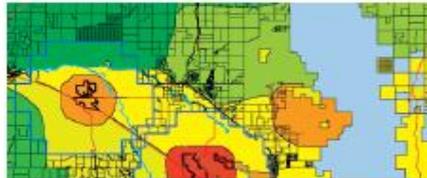


# TRANSFER OF DEVELOPMENT RIGHTS FEASIBILITY STUDY

*FOR JAMES CITY COUNTY*

## TODAY'S PRESENTATION WILL DISCUSS:

- BOS Guidance
- Market Analysis Deliverables and Results
- Recommendations
- Decision Points for Work Session



## PREVIOUS BOS GUIDANCE ON KEY ISSUES

BOS guidance on the following items:

- **PSA** – Study reshaping the PSA if necessary to optimize receiving areas while protecting environmental sensitive areas.
- **Landowner Expectations** – Use TDR as a way to make rural land owners whole in the event of a downzoning from the existing 3-acre zoning.
- **Calculation of Development Rights** - In sending areas, calculate development rights based on gross acreage minus RPA only.
- **Receiving Areas** - Should include commercial areas suitable for development, EO, A-1 and R-8 land inside PSA that have not been built on.
- **Transfers** –consider both residential to residential, and residential unit to commercial square footage.
- **Development Potential** – do not increase the overall net number of residential units permitted in the County.

# *Market Study Results*



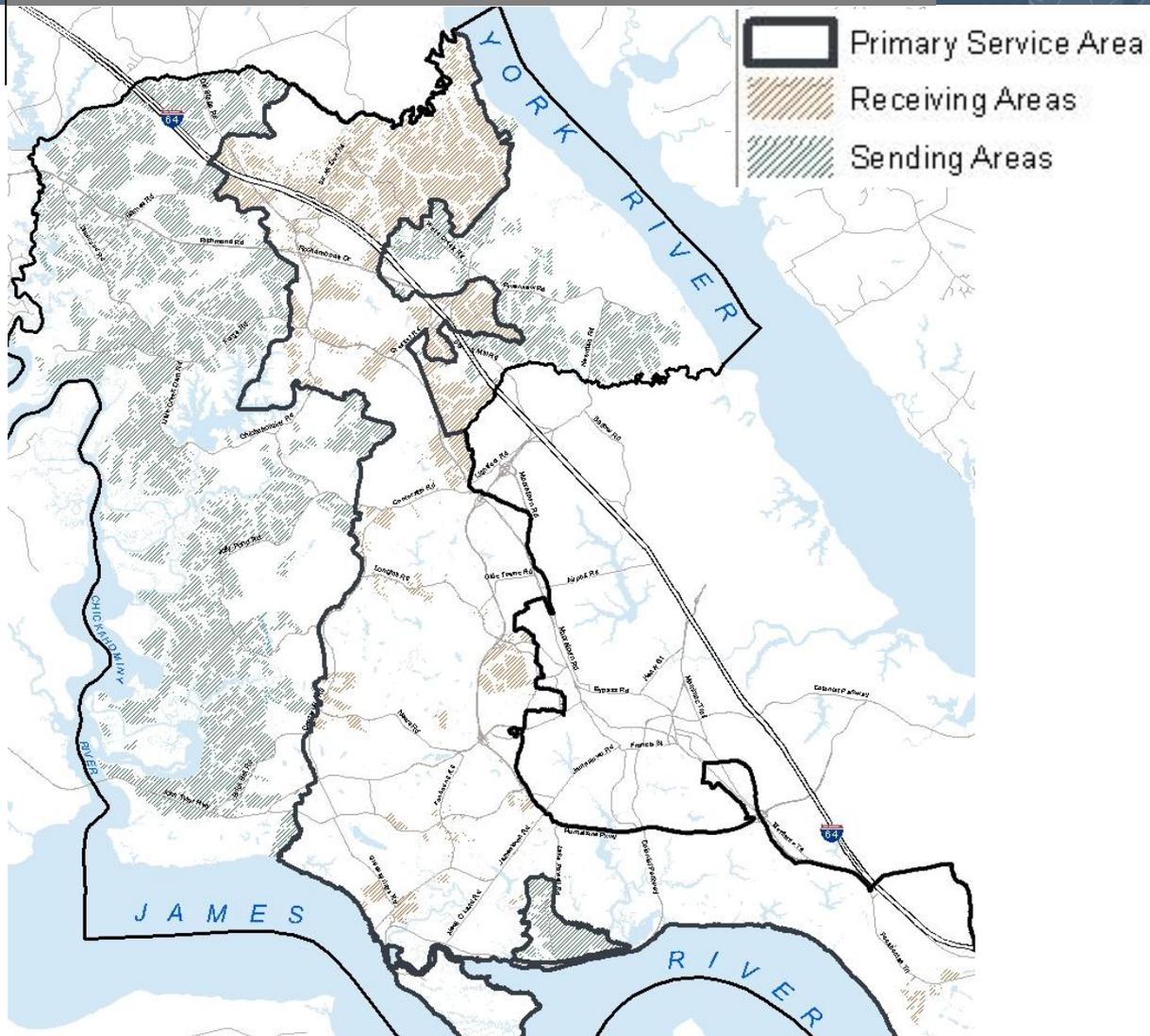
**TRANSFER OF DEVELOPMENT RIGHTS FEASIBILITY STUDY**  
*FOR JAMES CITY COUNTY*

## CONTEXTUAL ANALYSIS CONCLUSIONS

- TDR could complement PDR at low cost to County
- A TDR Bank could complement the Greenspace program
- TDR can be used to permanently conserve AFDs
- RPAs in TDR sending areas should not be allocated TDRs

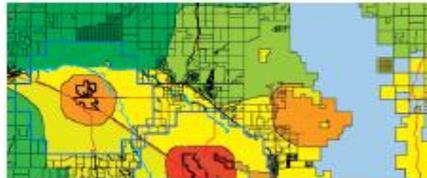


# SENDING AND RECEIVING AREAS



## MARKET ANALYSIS

- TDRs valued at \$40,000 each in sending area
- TDRs valued at between \$350 and \$15,000 in receiving areas
- TDR transfer ratios range between 114:1 (receiving-area bonus units/sending-area development rights) and 2.7:1
- Maximum 28% of sending-area TDRs could be transferred given the receiving areas selected and transfer ratios



# *Implementation*



## TRANSFER OF DEVELOPMENT RIGHTS FEASIBILITY STUDY *FOR JAMES CITY COUNTY*

## SENDING-AREA TDR STRATEGIES

*Strategy 1: Permit landowners to exercise all development rights on-site or sell them in the TDR program.*

- For example, a landowner who possesses 30 acres of property zoned at one unit to 3 acres (1 un/3 ac) would have ten development rights. He or she could build ten units on-site; sell ten development rights in the TDR program; or choose any combination of the two.

*Strategy 2: Cap on-site density below current zoning*

- For example, in Montgomery County, a landowner who possesses 50 acres of property zoned at 1 un/5 ac might be able to build two units on-site (1 un/25 ac) and sell the remaining eight development rights in the TDR program.

## RECEIVING-AREA TDR STRATEGIES

**Strategy 1:** *Require developers to provide TDRs to obtain maximum density currently permitted.*

Developers could obtain a portion of the density permitted under current zoning through normal processes, but use TDRs to obtain to maximum density permitted

**Pros:** No increase in Comprehensive Plan build-out

Relatively high TDR absorption

**Cons:** Adds requirements to maximize density already permitted under zoning

Requires floor area ratio cap on commercial

## RECEIVING-AREA TDR STRATEGIES

### **Strategy 2: *Require developers to provide TDRs to obtain bonus densities beyond currently permitted maximum***

Developers could use TDRs to obtain bonus units or bonus FAR above what the zoning designation currently permits

**Pros:** Strong developer incentive

**Cons:** Low TDR absorption if no demand for added density

Increase in Comprehensive Plan build-out

Changes to recommended densities in Comprehensive Plan

Requires floor area ratio cap on commercial

## RECEIVING-AREA TDR STRATEGIES

### **Strategy 3:** *Incorporate a TDR option into the rezoning process*

TDRs would be required or encouraged for a rezoning in the receiving areas – for example, from A-1 or R-8 to R-2 or R-5

**Pros:** No increase in Comprehensive Plan build-out

Relatively high TDR absorption

**Cons:** TDRs would be added to proffer guidelines

Legislative amendment to require TDR for rezoning

*CONCLUSION AND  
SUCCESSFUL  
TDR PROGRAM  
CRITERIA*



**TRANSFER OF DEVELOPMENT RIGHTS FEASIBILITY STUDY**  
*FOR JAMES CITY COUNTY*

## CONCLUSIONS AND RECOMMENDATIONS

- TDR program is feasible but constrained by:
  - Weak demand for TDRs *now*. Could increase when real estate market rebounds or if proffers are reduced/waived for TDR compliance
  - Oversupply of sending sites not allowed under state law
- Demand is higher if TDR baselines are set low – this adds to cost of current projects
- Demand is lower if TDR baselines are set high – this is a stronger incentive to participate but could require comp plan changes
- A FAR baseline would be required to be set for commercial receiving areas

## SUCCESSFUL CRITERIA

- ✓ Suitable Sending and Receiving Sites

There are receiving areas that can transfer sending area TDRs, but adjustments to areas evaluated need to occur to conform to State TDR law

- ✓ Demand for Development in Receiving Areas

Demand for new development will grow, and a shift in land use paradigm to more compact urban fabric would support TDRs and conserve land outside of PSA

- ✓ Adequate Incentives for Landowners and Developers

Ratios are designed for free-market transfers. If strategies 1 or 3 are implemented, there will be strong demand for TDRs.

- ✓ A Clear, Easy-to-follow Process for Participants

Receiving-area developers want reduced proffers or streamlined/ministerial approval in exchange for TDR compliance.

*Key Decision  
Points for Board  
of Supervisors*



**TRANSFER OF DEVELOPMENT RIGHTS FEASIBILITY STUDY**  
*FOR JAMES CITY COUNTY*

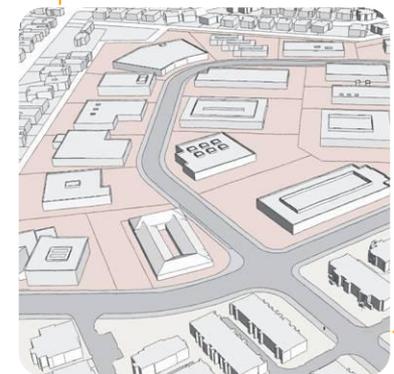
## DECISION POINTS

1. Move forward with TDR implementation?
2. How to reconcile sending supply and receiving capacity discrepancy?
3. Should the EO be a receiving area?
4. Which receiving area implementation strategy should be selected?
5. Should proffers be waived or reduced for TDRs?
6. Which transfer option should be allowed?

## DECISION POINTS

Move forward with TDR implementation?

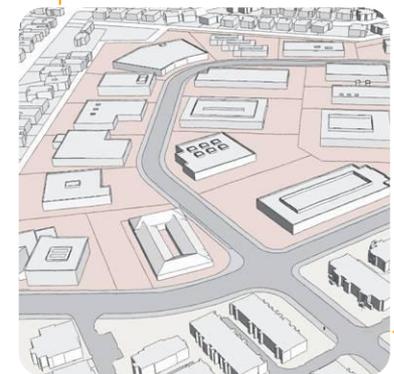
- **Pro:** This analysis determined that this market-based conservation tool is feasible.
- **Con:** This analysis determined that the TDR market is weak, resulting in high transfer ratios that may only conserve approximately a maximum of 30 percent of the selected sending areas and require a series of complex decisions to implement the receiving-area framework.



## DECISION POINTS

How to reconcile sending supply and receiving capacity discrepancy?

- Under Strategy 1, only 1,500 of the 5,500 TDRs in the sending area could be absorbed in the receiving area.
- 5 options for reconciling this discrepancy are:

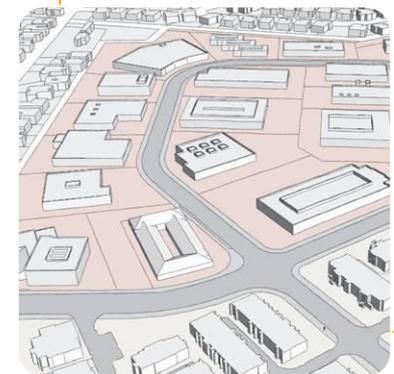


## DECISION POINTS

*A. Pair strategies 1 and 2 to implement the TDR program, or strategies 2 and 3.*

**Pro:** The capacity of receiving areas to absorb sending-area TDRs will be greatly increased because TDR compliance would occur at low and high project densities, which would also have the benefit of creating more potential participants in the TDR market.

**Con:** As stated above, Strategy 2 would require policy changes in the Comprehensive Plan and would increase the overall number of units that could be built in the County; Strategy 3 would increase the cost of development unless state law could be changed to require TDR rather than having it remain a voluntary program.

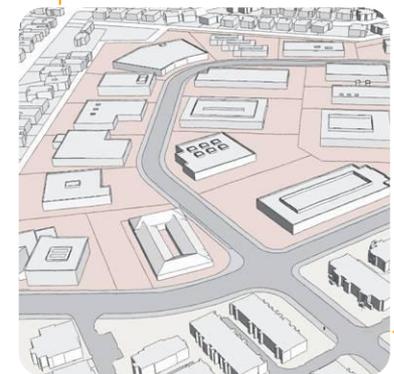


## DECISION POINTS

*B. Reduce the size of the sending area eligible for the program*

**Pro:** The sending area supply could be reduced to equal the receiving area capacity, such as selected receiving areas around Forge Road. This would result in a more concentrated area of preserved land (as opposed to having scattered preservation due to the voluntary nature of the program).

**Con:** The County would have to make politically difficult decisions about which sending areas to include and which to exclude; and the overall amount of land conserved might decline.

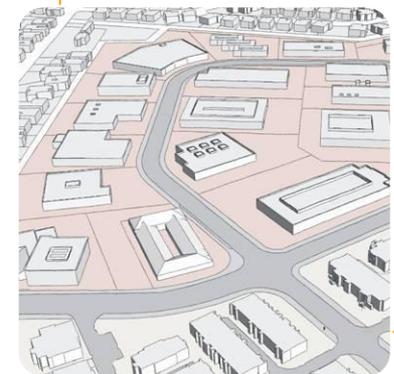


## DECISION POINTS

*C. Increase the number of receiving areas to increase the absorption capacity.*

**Pro:** The sending area supply would equal the receiving area capacity.

**Con:** It would be difficult for the County to identify enough viable receiving areas given the current market and development conditions; land and infrastructure constraints; and citizen feedback.

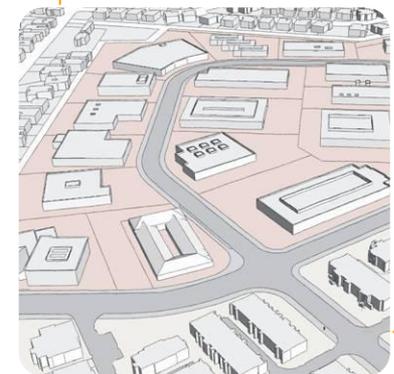


## DECISION POINTS

*D. Downzone sending area properties so that sending-area landowners have fewer development rights and allow transfers at the densities in the new zoning.*

**Pro:** The sending area supply could equal the receiving area capacity depending on the revised zoning requirements.

**Con:** Downzoning rural areas could meet considerable resistance from property owners.

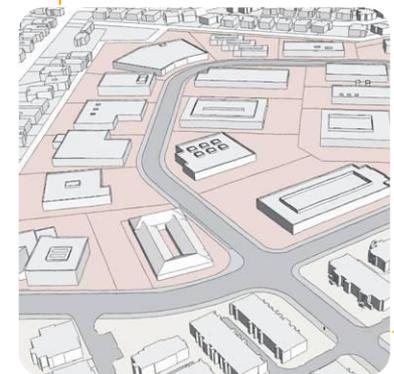


## DECISION POINTS

*E. Lower transfer ratios by waiving or reducing proffers on receiving-area projects.*

**Pro:** More developer revenue in receiving areas would be freed up to pay for TDRs.

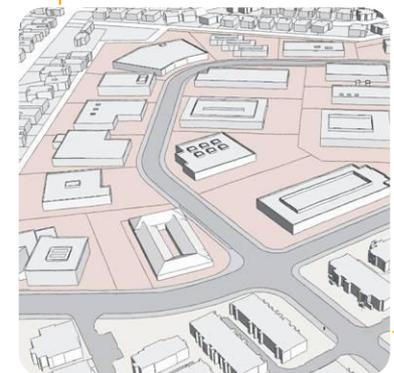
**Con:** Receiving areas may not obtain as many public benefits unless innovative alternative funding strategies such as a TIF are pursued. Can only be implemented when a rezoning is requested.



## DECISION POINTS

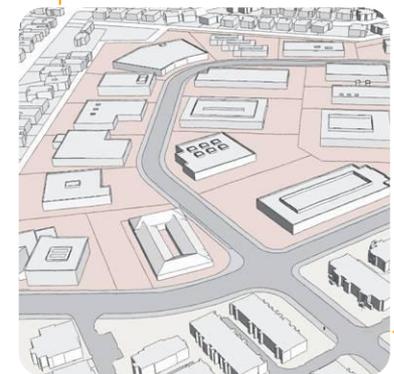
Should the EO be a receiving area?

- When EO is rezoned, TDR and FAR provisions could be included to catalyze demand for TDRs.
- **Pro:** Including provisions in the EO ordinance for TDRs will offset the fact that the project would remove farmland. Including the EO also makes it easier to meet the state requirement that supply equal absorption capacity.
- **Con:** TDRs would increase the cost of developing in the EO area and would necessitate adoption of a FAR cap. This may conflict with the Comprehensive Plan goals of procedurally simple EO development unless additional incentives are provided, such as reduced impervious surface requirements or processing TDR transfers administratively rather than legislatively.



## DECISION POINTS

Which receiving area implementation strategy should be selected?



## RECEIVING-AREA TDR STRATEGIES

**Strategy 1:** *Require developers to provide TDRs to obtain maximum density currently permitted.*

Developers could obtain a portion of the density permitted under current zoning through normal processes, but use TDRs to obtain to maximum density permitted

**Pros:** No increase in Comprehensive Plan build-out

Relatively high TDR absorption

**Cons:** Adds requirements to maximize density already permitted under zoning

Requires floor area ratio cap on commercial

## RECEIVING-AREA TDR STRATEGIES

### **Strategy 2: Require developers to provide TDRs to obtain bonus densities beyond currently permitted maximum**

Developers could use TDRs to obtain bonus units or bonus FAR above what the zoning designation currently permits

**Pros:** Strong developer incentive

**Cons:** Low TDR absorption if no demand for added density

Increase in Comprehensive Plan build-out

Changes to recommended densities in Comprehensive Plan

Requires floor area ratio cap on commercial

## RECEIVING-AREA TDR STRATEGIES

### **Strategy 3:** *Incorporate a TDR option into the rezoning process*

TDRs would be required or encouraged for a rezoning in the receiving areas – for example, from A-1 or R-8 to R-2 or R-5.

**Pros:** No increase in Comprehensive Plan build-out

Relatively high TDR absorption

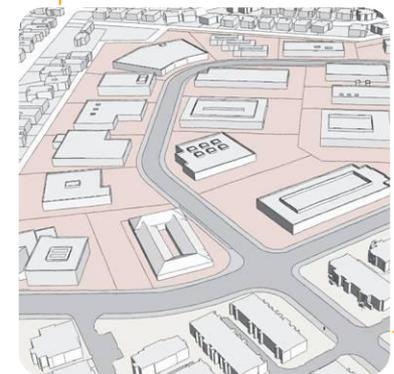
**Cons:** TDRs would be added to proffer guidelines

Legislative amendment to require TDR for rezoning

## DECISION POINTS

Should proffers be waived or reduced for TDRs?

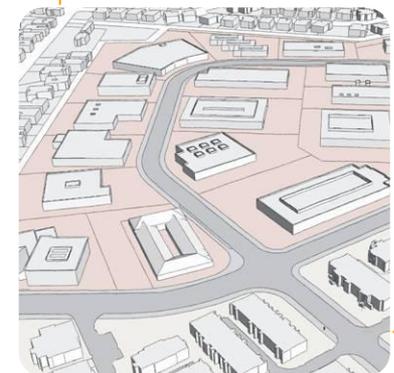
- Proffers provide essential support for community services. However, it might be possible to waive or reduce proffers for TDR participants
- **Pro:** Relief from some or all proffers would allow lower transfer ratios (i.e. 1 sending area right would equal fewer receiving area bonus units). Strong incentive for receiving areas developers to participate.
- **Con:** Proffer relief would essentially divert funding from traditional beneficiaries (roads, sewers, etc.) to the TDR program. Can only be implemented when a rezoning is required. May shift TDR program costs away from the private sector and towards the public sector.



## DECISION POINTS

Which transfer option should be allowed?

- Direct buyer-seller exchange, TDR banks, and a cash-in lieu are the instruments of TDR transactions.
- **Pro:** Multiple transfer options will stimulate TDR market activity. If private transactions are slow due to buyer–seller timing issues, TDR banks and in-lieu funds can smoothen out the number of market transactions.
- **Con:** A TDR bank and cash in-lieu would increase the TDR program’s administrative cost. A bank should be staked with considerable up-front funding. Cash in-lieu can only be included in the proffer guidelines for rezoning.





# TRANSFER OF DEVELOPMENT RIGHTS FEASIBILITY STUDY

*FOR JAMES CITY COUNTY*