

Transferable Development Rights:

A Policy Analysis of a planning instrument and its application in Vancouver

by Ari Goelman
B.A., The New College of the University of South Florida, 1995

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We accept this thesis as conforming to the required standard

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Department of School of Community & Regional Planning
The University of British Columbia
Vancouver, Canada

Date 6/23/99

Abstract

In this thesis I examine the planning tool most commonly known as the transfer of development rights (TDR) and discuss its application in Vancouver. Before addressing Vancouver's use of TDR, I establish the context of TDR use in North America, suggest appropriate policy objectives and constraints for TDR programs, and outline a series of operational decisions made in designing any TDR program. I proceed to evaluate Vancouver's TDR program in light of these discussions.

I found that TDR programs can be effective tools for redistributing the costs and benefits of certain types of land use restrictions. However, TDR programs vary widely in their effects. Depending on the specific design of a given program, it can have very different implications.

In Vancouver, the TDR program is a relatively minor adjunct to the process of heritage preservation. Like any planning tool, Vancouver's TDR program strikes a balance between various objectives. However, it can be generally stated that fairness or distributional concerns are prevalent in Vancouver's program. Specifically, the protection of property rights is one of the defining elements of the program.

Vancouver's program has been marked by a strong discretionary component, which has tended to create high transactions costs. In recent years, though, transaction costs in Vancouver have gone down significantly. As transaction costs have decreased and the program has grown more fluid, the take-up rate of transferable density in Vancouver has increased. These trends are widely expected to continue, as Vancouver's transfer of density program further matures.

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Chapter 1 -- Introduction (Outline)

- I. Introduction
- II. Relevance of the Study
- III. Methods
- IV. Paper Structure

Chapter 1 -- Introduction

I. Introduction

Vancouver has long been noted for the flexibility and discretionary quality of its planning policies. Due to the City of Vancouver's special incorporation through its own charter, its government has had significantly more flexibility than other municipalities in British Columbia. Since the early 1980s, Vancouver has had an innovative heritage conservation program which strives to preserve the most notable structures in Vancouver and increase the public's knowledge and appreciation of Vancouver's built heritage.¹

When the heritage conservation program was instituted in 1983, a planning tool known in Vancouver as "the transfer of density rights" was enabled as a minor adjunct to it. After years of disuse, recently this tool has become increasingly visible in Vancouver. This is exemplified by the ongoing construction of the Wall Centre in downtown Vancouver. At 450 feet, the Wall Centre will be the highest structure on the Vancouver skyline, incorporating almost 250,000 square feet of transferable density.

Essentially, a transfer of density program allows one land owner to purchase the unused density of another land owner and use it on their site. As will be discussed at length in Chapter 5, the developers of the Wall Centre purchased the density of three heritage buildings in order to accumulate enough density rights to permit their structure's additional density.

Perhaps due to this additional recent exposure, the transfer of density rights has become an almost common suggestion for dealing with municipal problems in Vancouver. In recent months, plans involving TDRs have been proposed in many different contexts. Examples of these proposals include: the

¹ City of Vancouver Community Services Group. *Heritage Fact Sheet 1*.

application of TDRs to preserve neighborhoods from further development;² their employment as a remedy to loft developments which find themselves in violation of city density specifications;³ and their use as a possible source of non-market housing.⁴ Before proceeding with such new uses of transferable density it is crucial to critically assess Vancouver's ongoing transfer of density program. Part of this assessment must involve a thorough understanding of the nature of the transfer of density policy

The first transfer of density program was instituted over three decades ago in New York City. In 1968 New York City adopted an innovative policy instrument known as Transfer of Density Rights (TDR) as a part of its fledgling program in heritage site preservation. At the time, its heritage site preservation program was extremely controversial; it would be almost ten years before the Supreme Court of the United States found that its methods and goals were constitutional. Today, New York City's heritage preservation program is one of the most successful in the world, enjoying a broad measure of public support.⁵ Throughout the United States, hundreds of municipalities have created heritage programs based on the one pioneered in New York. Nonetheless, even in New York the use of TDRs remains a controversial policy instrument.⁶

Relative to New York City, Vancouver was a latecomer to both heritage preservation and TDR. It was not until 1983 that Vancouver's City Council passed legislation creating both a heritage conservation and transfer of density program for Vancouver. Fifteen years of North American planning experience with TDR programs allowed Vancouver's program to avoid some of the pitfalls

² Rasheed. interviewed March 16, 1998.

³ Appelbe. p. 13.

⁴ City of Vancouver Community Services Group. *Non-Market Housing in the City of Vancouver 1953-1995 (Excerpt from the 1996 non-market inventory)*.

⁵ Allison. Class notes.

⁶ Bagli. p. B1.

encountered by earlier programs. Nonetheless, it was almost a decade before the program saw actual transfers of density occur, and only now, more than fifteen years after the original legislation was passed, is the program seeing significant levels of use.

In this thesis, I explore the current state of TDR programs in North America, using Vancouver's transfer of density program as a case study. I examine TDR programs in general, construct a policy analytic framework, and analyze the current state of Vancouver's program. I pay particular attention to the different ways in which TDR programs can be implemented, and discuss the consequences of the implementation decisions made by Vancouver planners.

II. Relevance of the Study

Vancouver's transfer of density program offers an excellent case study of the current state of TDR programs in North America. The intellectual reference created by past studies of TDR programs elsewhere allows the researcher to place Vancouver's program in the broad context of prior TDR programs. Such a study offers a new contribution to the canon of research on TDRs in North America.

Although a wealth of research has taken place on TDRs, most of it has concentrated on either the theoretical issues associated with the ideas^{7,8} or on the older and more successful programs. Case studies of TDR programs have been done, but for the most part they have focused on brevity, rather than depth.⁹ Even the latter sort of study has tended to overlook Vancouver's program. Until very recently, Vancouver's program had seen so little use that its absence from planning literature was entirely justifiable. For a variety of reasons, addressed in the body of this thesis, recent years have seen a rapid increase in the use of Vancouver's program. This work, then, will add Vancouver's example to the

⁷ Ziegler. p 147-166.

⁸ Hahn. 1984. p. 753-765.

⁹ Roddewig & Inghram. p.1-38.

growing number of cities that have documented successful TDR programs.

It is hoped, as well, that this work will better inform Vancouver's planning and development community with respect to Vancouver's transfer of density program. Given the rapidly increasing level of use which the program is seeing, it is important to be clear on its objectives and accomplishments. In this work, I have focused on explicitly identifying the objectives of the program, and the extent to which the program has met these objectives. Further, I have outlined the various mechanisms with which TDR programs can be implemented and their likely effect on attaining objectives. I have undertaken both of these tasks with the express hope that these explicit identifications would be of aid to planners in evaluating and improving the program.

III. Methods

I began my research with a comprehensive literature review. After beginning with the writings of such early proponents of TDR as John Costonis¹⁰ and Dwight Merriam,¹¹ I proceeded to review more recent analyses and case studies. Given the nature of TDR, I also surveyed environmental economic literature on tradeable permits, and legal literature on property rights. Finally, I concluded with an examination of miscellaneous planning literature that dealt with issues related to TDRs such as density and discretionary planning.

Upon accomplishing the bulk of this largely theoretic literature review, I proceeded to examine the planning documents and by-laws of the City of Vancouver. After reading the planning documents and by-laws directly related to Vancouver's transfer of density policy, I then explored the files of every Vancouver address which had been permitted to sell transferable density, as well as several addresses which had been permitted to purchase the density.

¹⁰ Costonis. p. xv-207.

¹¹ Merriam. p. 77-139.

Following this investigation, I visited the Vancouver sites about which I had researched. I photographed the buildings and where possible spoke to the person responsible for vending or purchasing the rights.

Additionally, I interviewed a variety of Vancouver planners, real estate consultants and developers who had been involved with the program. I attempted to speak with at least one individual who had participated in each aspect of Vancouver's program. Although this was made difficult by the apparent reluctance of many developers to speak with a student researcher, I believe this goal was achieved. The goal of these interviews was to synthesize the practical knowledge of these experienced professionals with the more academic knowledge I had previously garnered.

Throughout this period, my ideas about TDRs in general, and Vancouver's program, specifically, constantly evolved. After completing most of the research described above I was fortunate enough to spend four months working for the Regional Plan Association of New York researching the potential of a TDR program in the east end of Long Island. In the course of this work, I was exposed to several of the professionals involved with the most successful TDR programs in North America. This experience lent a depth to my analysis of TDRs which I incorporated into my thesis upon my return to Vancouver.

IV. Paper structure

I begin the thesis by describing the broad policy context of TDR. I define to what exactly the term refers, and contrast it to several related terms. After outlining the evolution of TDRs in North America and abroad, I conclude the second chapter with a comparison of TDRs to tradeable permits.

In the third chapter I discuss policy objectives and constraints for TDRs. I

address the general question: "what makes a policy good?" and present a schematic suggested by Herman Daly to this purpose. Using this schematic as a base, I propose three general policy objectives, with a series of additional, more specific objectives that might be applied to TDRs. I complete the chapter with a description of economic, legal and urban design constraints which impact upon the ability of TDR programs to meet these objectives.

The fourth chapter focuses on the practical decisions surrounding the implementation of TDR programs. I describe a variety of complex decisions and interdependencies implicit in implementing even a simple TDR program. I conclude with an examination of the impact each of these decisions has on the objectives elucidated in the previous chapter.

Finally, in the fifth chapter, I apply the previous analysis to Vancouver. After summarizing the structure and history of Vancouver's transfer of density program, I place it in the context of the decisions examined in chapter four. I explore several additional issues particularly relevant to Vancouver's situation, and I present seven case studies completed for the purpose of this discussion. The relatively small amount of usage Vancouver's program has seen allows for a detailed case study of every building that has sold transferable density, as well as one building-in-progress which is utilizing a large amount of transferable density. I finish this chapter with an evaluation of the program's success in attaining the objectives established in the third chapter.

The thesis concludes with the sixth chapter. In it, I summarize the findings of the previous chapters, both with respect to TDR in general and with respect to Vancouver. I end the thesis on a more speculative note. I believe that the research detailed in this thesis raises many questions; in the final section I briefly discuss these possible avenues for future research.

Chapter 2 -- A Policy Context (Outline)

- I. Introduction
- II. Transferable Development Rights
- III. Defining Related Terms
- IV. History of TDR
 - A. The British Development Rights Experience
 - B. North American Precedents
- V. Comparison to Tradeable Permits
 - A. Similarities to Transferable Development Rights
 - B. TDRs as a Tradeable Permit Regime
- VI. Conclusion

Chapter 2 -- A Policy Context

I. Introduction

Since their initial suggestion in 1961, transferable development rights (TDRs) have been an extremely popular topic in certain fields of academia.¹² Urban economists, planners, geographers and lawyers have produced a wealth of writing on the subject in the past thirty years, and hence, a comprehensive literature review allows considerable insight into the nature of the system. In fact, one of the chief enigmas surrounding TDRs is the relatively limited use of a tool about which there is such a large amount of writing. Theorists have long seen a potential in TDRs which has by no means been fully realized.

Before addressing transferable development rights (TDRs) in Vancouver it is crucial to construct a conceptual framework within which to conduct the analysis. In the next three chapters I will introduce the context and tools with which Vancouver's TDR program will be analyzed. This rich theoretical grounding will strengthen the resulting recommendations.

This chapter serves as a brief introduction to TDRs and the policy context in which they take place. I begin by defining TDRs and related terms. After proceeding to examine the history of TDRs, I compare TDRs to tradeable permits, a related concept from environmental economics. This comparison leads to the description of certain constraints within which a TDR program must operate; however for the most part the discussion of constraints will be delayed until the next chapter.

II. Transferable Development Rights

Despite the abundance of theoretical writing about TDRs, conceptually they are extremely simple. The ownership of property is often described as a

¹² Pizer, p. 203.

bundle of sticks, composed of a series of different rights. Among these rights are the rights to develop a property to a certain density. TDRs allow one property owner to transfer unused density rights to another property owner. As I will discuss below, TDR schemes have been carried out for a number of purposes. The most common purposes have been preserving agricultural land on the ex-urban fringes, preventing development in areas with sensitive ecosystems and preserving heritage sites within cities.

A classic example of TDR use concerns heritage preservation. Assume a city mandates the preservation of a certain heritage building. The owners of the heritage property are outraged, as the existing zoning allows a much larger, and more profitable, building to be erected on their site. Through the use of TDRs, the city allows the owner to sell the excess rights permitted by the existing zoning. The owners are compensated at no public expense, and the building is preserved.

III. Defining Related Terms

There are several terms which are often used interchangeably or confused with TDRs. Transferable development credits (TDCs) and transferable development potential (TDP) are used almost as synonyms for TDRs. Some argue that TDP is more appropriate for Canada than TDRs, since under Canadian law a private land owner does not have the same *right* to develop as in the United States.¹³ Rather they are granted the *potential* to develop. This argument may have semantic merit, but in practice, both TDR and TDP refer to the same concept. In order to minimize confusion, for the bulk of this paper I will simply use TDR. The exceptions to this will occur during the sections dealing with Vancouver's program. Vancouver planners term Vancouver's TDR program a "transfer of density" program; hence, in the discussion of Vancouver's program,

¹³ Richard. p. 12

transfer of density is occasionally used as a synonym for TDR.

The purchase of development rights (PDRs) may be a component of a TDR scheme. PDRs occur when a government or charity purchases development rights with the sole purpose of extinguishing them.¹⁴ No transfer occurs, but the development rights are severed from the land to which they were attached. It is clear that PDRs would require more public money to accomplish than privately financed TDRs. However, acquiring only the development rights of a property is far cheaper than purchasing the entire property in question. Hence, PDRs offer a relatively cheap way for a government to compensate a landowner for a development restriction without allowing additional density elsewhere. They have been suggested both as a component of a larger TDR program, and as an alternative to TDRs.

Air rights are a more contentious term. Air rights are often used in error to describe development rights.¹⁵ In fact, they can refer to several phenomena, none of which are the equivalent of development rights. Usually, air rights refer to the right to develop the air above a property. Often used by rail-road companies selling the space above their tracks, their use has been cited as a predecessor to development rights.

Alternatively, air rights can refer to the ability to restrict development on an adjacent lot. For example, developers can insure their building a perpetual ocean view by purchasing the air rights to the low lying building next to theirs. This meaning of air rights is even more closely related to that of development rights; like development rights, this use of air rights recognizes that the value of land is composed of a bundle of discrete present and potential uses, which may be sold separately. Nonetheless a clear distinction can be demarcated between

¹⁴ Merriam. p. 82.

¹⁵ Galowitz. p. 58 -63.

development rights, the ownership of which permits additional density, and air rights, the ownership of which simply denotes a restriction on a neighboring property.

The basic ways in which density or building height is defined by most North American cities should also be explained. Most North American cities set a ratio between the size of the property and the amount of floor space permitted. This ratio is known alternately as a Floor Area Ratio (FAR) or Floor Space Ratio (FSR). Although such a floor space limit theoretically does not limit a building's height, in practice, technical and economic factors turn this floor space restriction into a height restriction. After reaching a certain narrowness it is no longer cost effective to build a building. Stricter cities may have height restrictions as well as FSR restrictions, but usually it is the density restriction which is most relevant. TDRs essentially allow the owners of sites to sell their extra FSR; as I describe in Chapter 4, this transfer can be calculated and implemented in any number of ways.

IV. The History of Transferable Development Rights

The British Development Rights Experience

The right of the government to regulate land use was recognized in Great Britain earlier and with greater conviction than in North America. Hence it is not surprising that an innovative planning technique such as TDRs might have early precedents in British town planning. Beginning as early as 1932 the British government passed acts attempting to recapture the windfall increases in land value resulting from government action. The British Town and Country Planning Act of 1947 consolidated earlier attempts and vested all development rights in the government. Although many of its more ambitious elements ultimately failed, causing unpredicted economic distortions and bureaucratic

entanglements, it left Britain with a legacy of planning control over development. Both its failures and successes, to some degree, foreshadowed the North American experience with TDR.¹⁶

North American Precedents

More than a century before TDRs were first implemented in North America a similar scheme was already in place with regard to irrigation. In the United States the Milldam Acts allowed downstream owners who wished to build dams to compensate upstream owners for the loss of their rights to develop flooded lands. More recently, agricultural acreage allotments were made transferable in the United States.¹⁷

TDRs were first suggested by Gerald Lloyd in 1961.¹⁸ Although several cities already allowed individual owners to merge the development potential of their properties, it was not until 1968 that New York City enabled the first true TDR scheme. New York created its TDR scheme by simply expanding property owner's existing ability to merge and distribute the development potential of their lots. This ability was expanded to include their neighbor's sites as well. Initially, sites could only send TDRS to adjacent, contiguous sites. The definition of adjacent was progressively broadened to allow sites immediately across the street, diagonally across the street, and eventually, to any sites along a "chain of ownership."¹⁹

New York's plan was almost immediately subject to criticism, both by the opponents of TDRs who felt that mandatory participation in a TDR scheme was unconstitutional, and from proponents of TDR who felt that New York's TDR

¹⁶ Merriam. p. 88.

¹⁷ Merriam. p. 85-6. Agricultural acreage allotments limit the production of certain commodities in the United States. Each farmer is only permitted to produce a certain amount of each commodity. By trading them, individual farmers could achieve economies of scale without the net production of a commodity increasing.

¹⁸ Pizor. p. 203.

¹⁹ Bernard. p. 78.

scheme was too limited and poorly structured to be effective. The former criticisms will be addressed in the next chapter, in the section devoted to legal issues. The most notable representative of the latter critique was John Costonis, the lawyer responsible for the "Chicago Plan".²⁰ In his description and defense of the use of TDRs to preserve heritage in Chicago, Costonis was the first to systematically discuss the legal, economic and urban design rationale for TDRs.

Costonis accurately identified the two key weaknesses of New York's program -- there was a lack of incentives to buy TDRs and a difficulty in finding receiving sites for the density. These same problems remain key issues in TDR programs today. Costonis introduced two novel features to deal with them. The first was the creation of a TDR bank. A TDR bank was intended to minimize much of the uncertainty of a TDR market, and serve as buyer of last resort for development. Additionally, he suggested the allowance of noncontiguous transfers, through the creation of transfer districts, into which development could be channeled.²¹

Ultimately the Chicago Plan failed politically. Despite their best efforts, Costonis and his supporters were never able to get it implemented in Chicago. The first decade of TDR's existence was marked by major resistance from a public unwilling to accept such changes to traditional zoning practice. Costonis identified the novelty and complexity of the plan as major factors in its political defeat.²²

Notwithstanding its political failure, the legacy of the plan can be seen in almost every TDR scheme since adopted. Non-contiguous transfers have become the norm in TDR programs, and TDR banks are components of the most

²⁰ Costonis. p. 28-65.

²¹ The allowance of noncontiguous transfers implies that sites need not be immediately adjacent to each other in order to transfer density. This is discussed at length in chapter four.

²² Merriam. p. 99.

successful TDR programs in the United States. These more recent and successful plans will be discussed in the next chapter regarding the implementation of TDRs.

V. Comparison to Tradeable Permits

TDRs have much in common with a concept found in environmental economics known as tradeable permits. Although the two are applied in different ways, I propose that insights could be gained by revisiting certain issues regarding transferable development rights in light of tradeable permit theory. Given the relatively small amount of past uses of TDRs, it is helpful to broaden the theoretical and practical base with which to discuss them.

Tradeable permits are an instrument of environmental regulation highly favoured by environmental economists. Like any environmental regulation or standards, tradeable permits are based on the idea that ecological constraints require society to limit certain types of material flows. However rather than tax polluters or simply forbid polluting activities, tradeable permits create a market regime subject to an explicit environmental constraint. The administrators of such a system choose whatever absolute level of the pollutant that they feel is permissible over some given area and then allow a system of tradeable permits to insure its efficient allocation. This allocation is efficient in that the limited amount of polluting activities are undertaken by those members of society who derive the most value from them; in economic terms the situation should tend towards the least cost equilibrium possible while attaining the desired level of pollutant reduction.

Although the idea of transferable discharge permits was first described in the late 1960s, they have remained largely theoretical constructs, with a few notable exceptions.²³ The two chief areas to which they have been applied in

²³ Stavins. p. 134.

the past are the control of sulfur dioxide emission in the eastern United States and the allocation of scarce water resources. However, a growing literature attests to the system's potential in other areas, particularly that of traffic management. The main advantages of such a scheme are its flexibility, and the resulting potential political palatability, as well as the relative lack of oversight required.

Most pollution pricing schemes immediately provoke a concern for the redistributive impacts of a policy. One of the chief attractions of a tradeable permit scheme lies in its lack of *inherent* redistributive implications. If the system is functioning correctly, without inordinate transaction costs, the final distribution of uses will be efficient regardless of the initial distribution of permits.²⁴ Hence, permits can be initially distributed in such a way as to minimize the income regressive impacts of pricing pollution. That is, lower income groups could be given disproportionately large initial permit endowments. In this way a tradeable permit scheme could even be made income progressive. Such an income progressive scheme may not be politically feasible; however, unlike most market based environmental schemes, under a tradeable permits scheme it is at least *possible* for income equity to be incorporated in the distribution of the rights to pollute.

Similarities to Transferable Development Rights

The similarities between the two concepts are fairly self evident. TDRs can easily be seen as a type of tradeable permit regime. The additional density to be traded in a TDR scheme corresponds to the polluting activity to be traded in a tradeable permits scheme; the initial zoning situation acts as the initial allocation of permits.

²⁴ With the single exception of a case in which monopoly or monopsony conditions come into being. Robert Hahn expands upon this issue in Hahn, 1984.

The differences are perhaps more revealing to the analysis. Whereas systems of tradeable permits are generally imposing limits on pollutants not previously regulated, zoning is almost universally present in municipal regulation. This has two implications.

The prior existence of zoning makes a system of transferable development rights more politically palatable than a new tradeable permit scheme applied to a previously unregulated pollutant. Unfortunately, the same factor which makes TDRs more politically palatable, seems likely to make it less effective. Unless the implementation of a comprehensive system of TDRs is coupled with a downzoning, they will necessarily lead to an overall growth in an area's density, as all allowable density within an area is actually used.²⁵ It is partially due to this concern that TDRs are not used as a comprehensive system.

A distinction must also be drawn between density and the less ambiguous pollutants most tradeable permit schemes control. Density is not a wholly negative output in the same way that carbon monoxide is. Many urban designers and human ecologists see a controlled increase in density as a positive output for a city. A TDR scheme does not necessarily lessen density, it simply rearranges its distribution. The issue of density will be addressed further in the next chapter.

TDRs as a Tradeable Permit Regime

Tradeable permit theory offers several important insights into TDRs. Given the economic roots of tradeable permits it is to be expected that these are largely concerned with the efficiency of TDR programs. TDR programs inevitably possess at least two of the attributes tradeable permit literature identifies as obstacles to an efficient equilibrium; the location of the polluting activity is significant and high transaction costs exist.

²⁵ Arik Levinson offers economic theory's confirmation of this intuitive conclusion. (Levinson, 1997).

Before addressing these concerns, though, it is worthwhile to briefly address the relationship between neoclassical economics and tradeable permits. Tradeable permit's apparent reliance on efficiency concerns may be deceptive. In fact, tradeable permits allow the administrator of a program to choose both the scale and distribution of an activity within which a market will function, before allowing the market to determine an efficient allocation of the activity. Herman Daly, a prominent ecological economist, attacks economic theory's reliance on efficiency as a sole gauge of proper policy, and he extols tradeable permits as an alternative tool of what Daly terms "ecological economics".²⁶ This will be discussed further in the next chapter; suffice it to note that given the link between tradeable permits and TDRs, Daly's analysis represents an important provision of TDR's ecological credentials.

The economic justification for both tradeable permits and TDR programs involve least cost rationale. The argument is that if society must regulate certain products, it is best to obtain the desired outcome at the least cost to society. Much of tradeable permit literature is devoted to proving that a tradeable permit market allocates polluting activities more efficiently than command and control regulation. However, when the analysis is applied to a situation where location matters, the results change. Economic analysis has found that in situations where the location in which the pollutant is emitted is significant, markets do not always arrive at the most efficient solution.²⁷

Considered as tradeable permit scheme, clearly TDRs fall under this classification; the location of the density is crucial in determining its significance in an area. As the old joke asks, 'what are the three most important things in determining a site's value? location, location and location.' As we shall see

²⁶ Daly. 1992. p. 185-193.

²⁷ Tietenberg. p 95-113.

below, location considerations are crucial in implementing a TDR scheme, for development rights carry very different values and implications depending upon the part of the city in which they are used. The crucial nature of location with regard to the placement of density is perhaps the most important reason that few planners would argue to replace traditional zoning with a comprehensive system of TDRs.

Tradeable permit literature identifies regulatory tiering as a way in which tradeable permits can be applied to situations where location is significant.²⁸ Under a scheme of regulatory tiering, more than one regulatory regime might be applied at one time. Applied to TDRs this might mean that a developer must satisfy both municipal requirements to possess a sufficient number of TDRs, and simultaneously build within neighborhood density restrictions. Although mitigating the problem of location, regulatory tiering could be expected to lead to higher transaction costs. North American municipalities have tended to opt for the more direct control allowed by a process of discretionary review.

Unfortunately, such discretionary review processes arguably create even higher transaction costs than regulatory tiering would have. As I will discuss in chapter four, several of the more rural programs have significantly reduced their level of discretionary review requirements. These programs instead facilitate TDR use according to specific formulas which dictate the allowed application of the development rights. Although the relevant planning literature does not utilize the term "regulatory tiering", operationally these programs are using regulatory tiering as a means of controlling the use of TDRs without extensive discretionary processes. However, these programs, too, continue to struggle with the issue of transaction costs.

Since the first introduction of tradable permits, transaction costs have

²⁸ Tietenberg. p. 103.

been identified as a major stumbling block to any tradeable permit regime.²⁹ This was confirmed more recently by economist Robert Stavins's mathematical proof that high transaction costs in a tradeable permit system present a major obstacle to an efficient outcome.³⁰ Intuitively, it is a logical conclusion. If transaction costs are too high, too few people will enter the market to make a program viable, or they will stop entering into transactions before an efficient equilibrium has been reached.

The problems are not insoluble, though. Many successful TDR programs offer smooth, well-facilitated processes, within which transaction costs are minimized. Although an economist might fault the outcome as less than perfectly efficient, the real world is perennially falling short of the high hopes of economic theorists. As Prentiss Williams writes, "TDC programs do not mean simply letting the free market operate in place of traditional land use controls. Rather they represent a carefully controlled and regulated use of a market mechanism to achieve land use goals."³¹ In the next chapter, I will expand upon the economic concerns of a TDR program.

VI. Conclusion

This chapter was devoted to defining TDRs and encapsulating the basic perspectives in constructing a successful TDR program. Before proceeding, it must be asked, why construct a successful TDR program? Also, how does one recognize if a program is successful?

In the next chapter, these questions will be explored. After I suggest appropriate objectives and goals for TDR programs, I return to the discussion of implementing TDRs. I conclude the next chapter with a discussion of the various constraints on a TDR program, and then, in the succeeding chapter, I

²⁹ Crocker & Rogers. p. 50,51,64,113.

³⁰ Stavins. p. 144.

³¹ Williams. p. 36.

examine the most important decisions made in the design of a TDR program.

Chapter 3 -- Policy Objectives and Constraints for TDRs (Outline)

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Chapter 3 -- Policy Objectives and Constraints for TDRs

I. Introduction

In the last chapter I introduced the concept of TDRs, explored their antecedents and discussed their relationship to tradeable permits. However, the rationale behind them was not articulated. In this chapter I address two crucial questions. Generally, what makes a policy mechanism "good"? More specifically, what makes a TDR policy a good one?

Traditionally, planning has equated a program's ability to achieve its goals in an efficient manner with its success. In the past urban planning was concerned with efficiency, to the virtual exclusion of distribution or environmental concerns. As Deryck Holdsworth and James Bottomley write,

In a society in which the major proponents of land use change are either the corporations or one level of government, the planning viewpoint of the city as a system to be manipulated towards efficiency has a prominent place.³²

However, increasingly, more groups have been able to make themselves heard in urban policy. As this has occurred, more concerns have been incorporated into planning. Efficiency has long been discredited as the sole measure of a program's success. At least two more objectives have been added in recent decades; both the importance of distributional fairness and the imperative to incorporate ecological concerns have become recognized by mainstream urban planning.

A set of criteria by which policies can be evaluated is necessary. Any number of potential criteria might be suggested; the one described below is one of many possible schemes. Using the framework created by Herman Daly as a starting point, and factoring in the opinions of the developers and planners interviewed for this purpose, I have created a set of criteria through which TDRs

³² Bottomley and Holdsworth. p. 71.

might be examined. These are not meant to represent a comprehensive list of policy objectives applicable to any and all policies. Rather, they establish an ad hoc framework with which to inform the discussion of TDRs.

II. Herman Daly's Policy Analytic Framework

The ecological economist Herman Daly presents an interesting framework for policy analysis.³³ Daly identifies three objectives of a good policy. These three goals are proper allocation, proper distribution and proper scale.

Allocation refers to the division of resources among alternate uses. This is the only one of the goals with which neoclassical economics deals, and it is addressed through price mechanisms and markets. The efficiency concerns of classical economics are incorporated in the goal of proper allocation.

Distribution refers to the division of resources among people. It is essentially meant to incorporate equity concerns. This goal is addressed through resource transfers such as taxes and subsidies. Ecological concerns can be somewhat subsumed under the goal of distributional fairness by addressing intergenerational distribution. However, Daly suggests that the third concern, scale, is the more effective way of addressing environmental preservation.

Scale refers to the physical volume of the global economy's throughput, significant relative to the fixed size of the ecosystem. The scale must be at least sustainable. This makes the necessary hierarchy between the ecosystem and the economy explicit -- the economy must remain smaller than a certain, sustainable percent of the ecosystem. When the economy was a minuscule part of the ecosystem, scale was irrelevant to public policy. However, as the economy consumes an ever greater portion of the ecosystem, scale can no longer be ignored.

After describing these three goals of economic policy, Daly cautions that

³³ Daly. 1992.

any tradeoff among the three goals involves a value judgment. Economic analysis can only measure efficiency improvements; it is incapable of measuring the opportunity costs of redistributing income from one cohort to another, or of expanding scale.

Daly's specific framework is worth noting for two reasons. Daly explicitly outlines a hierarchy in which the three goals should be placed; scale should be given first concern, followed by distribution and then, finally, allocation. Also, scale is a particularly useful concept in urban planning, given the degree to which the scale of a development and its surrounding tend to effect its success.

Daly offers tradeable permits as an ideal policy instrument of ecological economics, encapsulating the proper relationship between scale, distribution and allocation.³⁴ First, a sustainable scale is set by setting the limit to a certain type of pollution -- within a given area, the total amount of sustainable pollution is set, and divided into a number of "permits to pollute." Next, these limited number of rights are distributed, according to the distributional goals. Only after equity and scale are thus addressed is the market allowed to allocate the rights to the most efficient use.

Daly's Scenario and TDRs

At first glance, Daly's scenario may appear inappropriate for analyzing TDRs. Daly is primarily concerned with economic policies; perhaps it is inappropriate to apply his schematic to urban planning. However, the same problems Daly pinpoints in classical economics long existed in urban planning. Moreover, the link between Daly's schematic and tradeable permits would seem to extend to TDRs, given the similarities discussed in Chapter 2.

However, there is a relevant discrepancy between the two types of schemes. The distinguishing characteristic of Daly's schematic is its reordering of

³⁴ Daly. 1992. p. 90-91.

objectives. Whereas much prior policy analysis tacitly gave first priority to efficiency, Daly explicitly identifies the reordering of priorities necessary to produce ecologically sound and fair policies. Unfortunately, TDR programs might find it more difficult than tradeable permits schemes to conform to Daly's reordered priorities.

Whereas tradeable permit programs necessarily determine their permissible scale before issues of distribution and allocation, this is not entirely true for TDR programs. As discussed in Chapter 2, a crucial distinction between tradeable permits and TDRs is the prior existence of a regulatory framework in TDRs. Any lowering of the overall density requires a politically difficult downzoning. There are two relevant scales to a TDR program -- there is the scale of the program, and the scale of the overall permitted density. The latter may not be subject to the control of the TDR program administrators. Hence, Daly's endorsement of tradeable permits might not entirely apply to TDR programs. These scale issues will be expanded upon in the next section.

In the following discussion of general policy objectives, Daly's objectives of proper distribution and allocation, will be subsumed within the more commonly understood objectives of creating a fair and efficient policy. The term "scale" will be retained in the discussion, as it offers a conceptually distinct, and helpful, method with which to examine the environmental impact of TDRs.

III. General Policy Objectives

I will now examine the general policy objectives of fairness, sustainability/scale and efficiency with reference to their relationship to TDRs. Historically, TDRs were suggested largely to deal with issues of fairness; hence, I will begin the analysis with issues related to fairness.

Fairness, Distribution and TDR

Two Types of Fairness

The term "fairness" can have many different meanings. A basic distinction can and should be made between the fairness with which a policy is applied and the fairness resulting from a policy's application. A policy which is applied fairly and consistently to all might, nonetheless, lead to an unfair distribution of costs and benefits. Both types of fairness are policy goals.

Assuring the fairness of a policy's application seems straightforward; it is generally accepted that a policy which can be applied consistently is fair in application. The bulk of this discussion will be concerned with the far more contentious issue of a fair distribution of costs and benefits. Some would argue that the people who bear the costs of a policy are entitled to the benefits; others contend that the people who need them the most deserve the benefits. TDRs deal directly with this issue, as they allow planners to redistribute certain costs of regulating development.

The Ability of TDRs to Redistribute Costs

The use of TDRs for heritage preservation offers a clear portrayal of their ability to redistribute costs. Before the advent of TDR, there were essentially two options for financing heritage preservation: the municipality could buy the site or forbid the owner from knocking down the building. If the city chose the former, then the public bore the expense of preservation; if the latter, then the landowner bore the cost. The invention of TDRs created a third option whereby neither of these parties directly bore the cost, as the government could compensate the landowner without using public funds.

Of course, the costs of preserving the property did not disappear. The costs were borne both by the public in the form of higher density elsewhere, and by the developer who purchased the development rights. The issue of density will be

discussed immediately below in the discussion of scale. More relevant to fairness is the developer who pays for the extra density. It could be argued that the costs of preserving the heritage site(s) have been redistributed to the developer who purchases the TDR. Both the controversy around TDR and its *raison d'être* center around this ability to redistribute costs. Although, the distribution of costs is ultimately a political decision, it is certainly worthwhile to make explicit the assumptions embodied by a TDR program. There are essentially two private parties involved in each transfer of density; hence, the discussion of fairness can be divided in two: i) is it fair to charge the developer for additional density? ii) is it fair to leave the property owner uncompensated for restrictions on their property?

Is it fair to charge the developer for additional density?

TDRs are premised on the fact that it is fair to charge the developer for an increase in allowable density, since otherwise they would have reaped windfall profits due to an upzoning, granted free of charge.³⁵ This is commonly referred to as TDR's ability to eliminate the wipeout/windfall implications of certain types of regulation. A windfall occurs when public planning increases the value of privately held property, either due to its proximity to improvements or due to its upzoning to a higher density. A wipeout refers to the reverse; that is, when a public decision reduces the development potential or utility of land. TDRs essentially force the beneficiaries of windfalls to give some of their unearned income to the victims of wipeouts.

Not surprisingly, the development community is generally resistant to these practices. Their opposition is usually based upon two arguments. First, they are being forced to bear the burden of amenities from which all society

³⁵ An upzoning refers to a change in zoning regulations which permits a higher density use of a given lot or lots of land.

benefits. Second, they contend that the zoning is being used inappropriately. If the zoning is set correctly, violations should not be permitted, even to provide amenities; if the zoning is set incorrectly, it should be rectified without charging them. These contentions will be further addressed below in the discussion of urban design and economic constraints. Suffice it to note, that these objections notwithstanding, it has become generally acceptable in most North American cities to allow developers to exceed a neighborhood's zoning in return for some type of amenity.

Is it fair to compensate landowners for restrictions?

This may seem a simple question. TDRs compensate land owners for restrictions in their ability to use their property. Since these restrictions reduce the value of their property, "obviously" it is fair to reimburse them, at least partially, for these restrictions. Yet equally "obviously", it is accepted that certain types of restrictions require no compensation.

Much public regulation heightens property value. For instance, the ability of a municipality to make zoning by-laws was initially affirmed by the U.S. Supreme Court due to the protection it afforded property value.³⁶ By isolating residential uses from manufacturing, the value of the residential land is increased. As Ann Strong writes, "clearly much of the value that some advocates now seek to protect against regulation exists in significant part because of the protection of the regulatory system they challenge."³⁷ Similarly, John Costonis argued in his initial defense of TDR programs that the value of urban property is almost entirely created by the public and maintained by government's investment in municipal services and facilities. Hence, he argued, the government has every right to limit the profits landowners might obtain.

³⁶ Strong. p. 9.

³⁷ Strong. p. 8.

Provided the government allows landowners a reasonable income, Costonis contended, it should have no obligation to allow them the lucrative profits to which they might aspire.³⁸

Property Rights and the Public Good

Of course, there is another party involved in TDRs -- the government, or more loosely, the public good. Both of the above debates takes place in the same, well trodden context - the conflict between the rights of private property and public good. This is a particularly acrimonious debate in urban settings, where the need for public regulation is especially fierce, and the potential profits from property development are especially lucrative. All urban regulation takes place within this debate.

Particularly, in the United States, the rights of private property are enshrined in the legal system. The fairness of this overall policy might well be challenged, but beyond question the TDR policy takes place within a society which protects the rights of certain individuals to possess more than others. This being the case, it can be no surprise that private individuals are compensated for certain restrictions required by the public benefit. In reality, it is largely a matter of degree.

The circumstances in which landowners are compensated, and the amount of compensation that they receive can be set anywhere along a broad continuum. A major question regards the income to which a property owner is "entitled," and hence the extent to which they must be compensated. That is, are they entitled to a highest and best use of their property or are they merely entitled to a reasonable return? If the latter, how much of a return constitutes a "reasonable" return?

Essentially the matter is a political decision, within the legal constraints

³⁸ Costonis. p. 34-35.

discussed below. Based on the above discussion, though, certain distributional premises of a TDR program can be made explicit. In general, TDR programs are based on the rights of land owners to be compensated for certain types of restriction on their land, and the ability of the municipality to allow zoning violations in return for gains to the public welfare, financed by private developers.

Within TDR, the degree of compensation land owners receive varies with the program design. The more voluntary a TDR program, the more a land owner must be compensated, as a voluntary program must coax land owners to take part. This issue will be made clearer in the next chapter.

Distributional Issues in Choosing Goals

Distributional decisions are also implicit in the selection of goals for a TDR program. If a municipality uses TDRs to preserve heritage it will be less able to preserve non-market housing. Similar tradeoffs exist between a TDR program and a program of incentive zoning. There is a finite demand for density within a city, and any use of it for one goal, diminishes the use possible for another goal.

It must be decided if it is more important to preserve heritage or offer affordable housing in a city's downtown. In a sense, these goals of a program can be seen as policy levers due to their ability to alter the attainment of the larger objectives. Again, these decisions are political ones, but the tradeoffs should be acknowledged in the construction of a TDR program.

TDRs and Scale

Restricting Development

As mentioned above, TDRs were initially suggested as a fair way to compensate people for development restrictions. The fair segment of this rationale has been discussed. The discussion of fairness, however, ignores the

rationale of the development restrictions themselves. The development restrictions are essentially attempts to better control the scale of human development.

Several of the most powerful objections to TDRs stem from the neglect of these scale concerns. If TDRs are allowed within an otherwise unchanged zoning scheme, the overall density of a city can be expected to increase.³⁹ The more comprehensive the TDR system, the larger this effect will be. If a city was to allow all properties to sell excess development rights, all development rights would eventually be used ... somewhere. Probably due to the unpredictable effects of such a scheme, no city's use of TDR has even approached such a freely trading system. That is, no city has entirely replaced mandated zoning with TDRs. Cities with TDR programs generally allow only certain properties or areas to sell TDRs, and certain properties or areas to use them.

Two Scales

As was mentioned above, there are in fact two scales to be determined in a TDR program; there is the scale of the program itself, and the overall scale of the city's zoning within which the TDR program operates. This dichotomy leads directly to a major philosophical difficulty of TDR. It is traditionally argued that zoning must be rational and necessary to be justified. If the initial zoning is indeed rational and necessary, how can TDRs be allowed to systematically violate it?

To a large extent, resolving this difficulty depends upon setting the two scales correctly. Not only must the overall allowable density be sustainable within the larger environment, also, it must allow for the occasional violation by TDRs. Due to this dichotomy several cities have downzoned their receiving areas in order to allow their TDR programs greater latitude. This issue, too, will

³⁹ Levinson. 1997.

be discussed in greater depth in the next chapter examining the policy levers of TDR programs.

Sustainable Scale -- The Issue of Density

Determining the proper overall level of a city's density is extremely complex. In most tradeable permit programs it is assumed that the lower the overall limit set for the pollutant, the more beneficial the effect on the environment. As mentioned in Chapter 2, this is not necessarily the case with density. Some planners argue that carefully managed density can lead to more sustainable communities which consume less resources. A dense urban environment is certainly more conducive to public transportation, and provokes lower per-capita infrastructure costs than a sprawling suburb.

In any case, once the desired density is determined, the TDR scheme must be adjusted accordingly. Regardless of the level of desired density, a correctly integrated TDR scheme will support it. It is unfortunate that setting the proper scale is all too often made impossible by political concerns. The political difficulties of downzoning any area prevent many municipalities from doing it. Although the widespread use of a TDR program need not endanger a city's urban fabric, improperly structured programs almost certainly do.

Efficiency, Allocation and TDR

Like any market system, TDR is expected to lead to more efficient outcomes than a regulatory regime constructed for the same purpose. However TDR differs from most market systems in the degree to which a free market can truly be allowed with respect to density. Location is simply too significant to allow density in a city to be freely traded. These issues will be further addressed in the economic and urban design constraints discussed below.

Although the objective of redistributing the costs of certain policies is

more central to the rationale of TDR programs than economic efficiency, the goal of efficiency does have a role. While density markets may be far from an economist's vision of a perfect market, within the constraints described above, they do allocate the TDRs to their most valuable uses. Importantly, TDR programs can be made more or less efficient based on the program's structure. In the next chapter, through an examination of the various policy levers of a TDR program, I will discuss which methods promise the most in terms of creating an efficient TDR program.

IV. Objectives for the Process

There is another class of objectives that must be considered. The policy is being implemented in order to reach the objectives discussed above; however, there are additional criteria that the policy, itself, should meet. Although some of these type of concerns can be subsumed under the larger objectives described above, several necessitate additional mention.

Based on a series of interviews with local planners and planning consultants I derived three subsidiary policy criteria not subsumed under any of the larger objectives. These are as follows: the policy should be understood and supported by politicians and the public, there should be clear and well-defined public goals, and some flexibility should be allowed. The first criteria speaks to the need for a politically feasible policy. The second, the existence of clear public goals, makes policies easier to understand, and it makes the policy's implementation more straightforward. The need for flexibility merits further discussion.

Given the overall policy objectives, the planners should be allowed some room for creative solutions. Too often, a policy's rigidity might prevent compromise solutions to situations. There can be tradeoffs between this goal and

the goal of fair application. That is, a flexible policy might be more subject to charges of partiality and cronyism. As I will discuss in the next chapter this conflict is visible with respect to TDRs in the decision regarding the level of discretionary review required.

It is not always possible for a policy to meet each objective. However, clearly identifying objectives makes it easier to mitigate the consequences of such failures, and to foresee problems which may arise as a result.

V. Operational Goals of TDR Programs

Finally, within the larger policy objectives addressed above, there are the actual goals of TDR programs. For instance, TDRs can be used to preserve heritage or bring about better urban design. As discussed elsewhere, these operational goals verge on policy levers in their ability to influence the attainment of the larger objectives.

There is a variety of potential goals which TDRs can attempt to address. Their capacity to eliminate wipeouts/windfalls make them an ideal tool with which to regulate certain types of development. As mentioned above, they were originally considered primarily as a tool for heritage conservation. In defense of their initial implementations, John Costonis wrote that the default in North America was the demolition of all heritage sites due to the economic demand for land in the inner cities.⁴⁰ Since then the goals of TDR use have been dramatically expanded; they now include farmland preservation (Montgomery County, MD); environmental preservation (the Pinelands program, NJ); open space preservation (New York City, NY); view preservation (Vancouver, B.C.); and the provision of low income housing (Seattle, WA).

A meaningful distinction can be drawn between urban TDR programs, with goals such as the preservation of low income housing and heritage and

⁴⁰ Costonis. p. xv--207.

more rural program, with goals such as the preservation of sensitive ecosystems or agricultural land. In general, assessors have found that rural TDR programs have tended to see the most use.⁴¹ I suggest several factors are responsible for this trend.

Strict restrictions on development tend to meet with more powerful opposition in urban areas, so it is generally more politically feasible to make rural programs mandatory. Due to their mandatory nature, they require less complicated formulas for determining the value of rights; mandatory programs do not have the same imperative to convince land owners to enter the program. Also, development in rural areas can be redistributed without requiring the detailed oversight necessary in more urban areas. Hence, rural programs require less discretion than urban programs. Finally, since not as much density is involved in rural programs, and more land is contained within the program's jurisdiction, it is easier for rural programs to set aside receiving districts for density. In general, rural TDR programs are simply more politically feasible, and require less complexity than their urban brethren.

The best examples of this trend are the Pinelands TDR program of New Jersey and the TDR program of Montgomery County, Maryland. In the sense of active TDR markets, these are two of the most successful programs. These programs have seen considerably more TDR use than many other programs combined.⁴² As the above discussion would indicate, both of these programs were applied in relatively rural localities. They were also both applied with "rural" goals, respectively to preserve farmland (Montgomery County) and to protect sensitive ecosystems (the Pinelands). Both programs have been phenomenally successful in achieving their goals, no doubt largely due to their

⁴¹ Roddewig & Inghram. p. 1-38.

⁴² *ibid.* p. 3-7.

active TDR markets.

This discussion provokes one more gauge of a program's success. For a TDR program to attain its goals, there is one particularly crucial criteria it must meet. It must be used. A program must see a certain degree of use or it accomplishes nothing. The remainder of this chapter discusses constraints on TDR programs. Successful negotiation of these constraints is directly related to the level of use seen by any given TDR program.

VI. Economic Constraints and Issues in TDR Application

Supply and Demand

The fundamental issue of any economic analysis is the relationship between supply and demand. A TDR program is usually premised on the fact that the municipality wishes to encourage the transfer of rights away from certain sites. The supply is thus created when the municipality allows certain properties or class of property to sever their development rights. This severance of development rights can be mandatory or voluntary. If it is mandatory, then in order for the TDR program to be legal in the United States, there must be a demand for the rights.⁴³ If the program is voluntary, demand must exist or no one will choose to sever the rights from their property. In either case, demand for development rights is necessary in order for the program to function.

A high level of demand for TDRs has interesting implications. On the one hand, the more demand that exists for TDRs, the more effective the program will be at reaching its goals. Higher demand leads to higher prices, which in a well structured program will result in relatively larger returns to society at a relatively lower cost as measured in quantity of density allowed. Essentially, high demand for density means each square foot of density can yield larger

⁴³ see the case of *Fred F. French Investing Co. vs. City of New York (Tudor Parks)* as cited in Merriam. p. 92.

returns to society.

A low level of demand, or an overly high level of supply can cripple a program. A central goal of the TDR program in Seattle, Washington was the maintenance of low income housing.⁴⁴ To this end, planners brought about the distribution of TDRs to a variety of low income housing groups. Unfortunately, low income housing groups in Seattle competed with such vigor to sell their TDRs that prices were depressed below what the city had expected. Consequently, the sale of TDRs did not generate sufficient money to meet all of the program's goals. The risk of such economic vagaries can be mitigated by properly structuring the TDR program to accommodate such trends.⁴⁵

However, high demand also possesses troubling implications for a TDR program. The value of TDRs derives from the difference between the value of the land with and without the additional density. Given this fact, it is clear that demand for TDRs results from a strong demand for real estate in an area. A strong real estate market often worsens the problem with which the TDR program was instituted to deal. For instance, a burgeoning real estate market leads to the destruction of heritage buildings, open space and low income housing. Thus, rising demand for density is likely to make the TDR market more active, but increase the difficulty of attaining the program's goals.

A TDR program cannot influence the overall demand for land. Exogenous conditions can and do interfere with a TDR program. An economic recession will injure a TDR market just as it will injure any other market. A central challenge of any TDR program is to maximize the demand for TDRs relative to the overall demand for land, essentially making the program more efficient subject to overall constraints.

⁴⁴ Roddewig & Inghram. p.10-12.

⁴⁵ Methods by which this can be accomplished will be discussed in chapter four.

Many of TDR's policy levers have the capacity to help this situation. Large areas can be designated as receiving zones. Central areas might be downzoned, or given the political difficulty of downzoning, growing areas might be insufficiently upzoned, in order to insure a demand for TDRs. Of course, transaction costs must be minimized, as well, to make the market appealing. Additionally, a TDR bank might be established to act a buyer of last resort for TDRs. The implications of all of these policy levers will be further explored in the next chapter.

Market Control and TDRs

Neoclassical economics finds that an efficient outcome depends upon no market control accruing to any given firm. Robert Hahn has examined the potential effects of market control in a TDR market.⁴⁶ Since the supply of rights is controlled by the regulatory agency, one firm is unlikely to gain monopoly control over the supply of rights. However, monopsony control may be more problematic. Monopsony power refers to a situation where the demand of one firm for a good represents such a large portion of the market, that that firm possesses a degree of market control -- through its actions it is able to influence the price extant in the market. In such a situation, prices will be lower than the efficient equilibrium. Hahn finds that such a situation is unlikely to exist in a TDR scheme. Depending upon the firm's excess demand for the density, and the overall limit set on the density, the firm will likely be unable to exercise its market power. Although market control is unlikely to represent a problem, it is nonetheless important to be aware of the monopsony potential in a TDR market.

Cost Distribution

The issue of cost distribution was mentioned above. To summarize the relevant discussion, the rationale for TDRs is largely based upon their ability to

⁴⁶ Hahn. 1984. p. 753-765.

redistribute the costs of providing a certain amenity. For instance in a functioning TDR scheme, the owner of a heritage site might be compensated for maintaining the site by selling TDRs to developers. This is thought to be fair since the developers would otherwise have reaped windfall profits from a free upzoning. However, many developers would argue that they are being forced to bear the cost of maintaining amenities from which all of society benefits.

To some degree the issue depends upon how great the potential windfall was. If developers are being driven out of the market by the necessity to purchase rights, and if land prices are being increased, then it would seem TDR programs are imposing an additional cost on developers and new purchasers in the market. If, on the contrary, the development market seems uninfluenced, it would seem that developers are simply unhappy at the loss of windfall profits. This issue may merit further study before instituting a TDR market in any given jurisdiction, in order to better understand the implications of TDRs on that particular land market.

VII. Legal Constraints and Issues in TDR Application

It is beyond the purview of this paper to provide a complete survey of the legal issues associated with TDRs. However, an understanding of certain legal concepts fundamental to their use is helpful in better contextualizing TDRs. Below, I summarize the chief issues which are generally associated with TDRs. Most TDR use has taken place in the United States; hence most legal challenges have occurred in United States' jurisdictions. As discussed below, there are important differences between the legal status of TDR in the United States and Canada; nonetheless, the two are sufficiently linked that the legal status of TDRs in the United States is relevant to this policy analysis.

The Legality of TDRs

Legal challenges to TDRs programs have been based primarily on three charges: they place unfair restrictions upon certain property; they are analogous to spot zoning; and they constitute illegal takings of private property. Of course, these criticisms only apply to mandatory TDR programs. U.S. courts have generally dismissed the first two criticisms and found that the third need not apply to TDR programs.

The legality of TDRs was determined in two crucial court cases relating to the application of TDRs in New York City. In the first decision in 1978, the U.S. Supreme Court found that the landmark protection with which the municipality had restricted the development of Grand Central Station did not constitute a taking.⁴⁷ The issue essentially revolved around that of just compensation. The court found that as long as the owners of Grand Central station were not denied reasonable economic returns, it was reasonable to restrict their right to build on their property.

This principle was refined in another New York case, this one involving the Tudor City Residential Complex.^{48,49} In this case, the city had prevented the owners of Tudor City from building on two private parks within the complex. In response to public pressure, the city had rezoned the privately-owned parks, severed their development rights, and created a one mile zone to accept TDRs. The city argued that, as in the case of Grand Central Station, the owners were being compensated for their rights through the sale of TDRs.

The Supreme Court did not agree. They found that compensation was certainly required as previously private parks were being preserved for public use. However, they found that in this case TDRs did not constitute just

⁴⁷ Strong. p. 8.

⁴⁸ Richard. p. 56.

⁴⁹ Merriam. p. 93.

compensation, as there was neither a market for TDRs nor a TDR bank to serve as a buyer. However, many have described this decision as "losing a battle but winning the war."⁵⁰ Again, the essential legality of TDRs was upheld. Only the details of their use were being challenged.

Compensation or Alternative Use?

An important issue which remains unresolved by the courts involves the basic nature of TDRs as a legal mechanism. Does the use of TDRs constitute an alternative use of restricted land or are they simply a type of compensation? This is a crucial question, as the answer would impose a different level of obligation on any governmental agency in the United States which uses TDRs.

If TDRs are found to be a means of compensation, then the government would probably be required to fully compensate property owners receiving TDRs; that is, property owners would be compensated for the highest and best use of their property, since a regulatory taking had taken place.⁵¹ However, if TDRs are an alternative use of property, they need only provide a reasonable rate of return in order to not constitute a regulatory taking.

This issue was addressed but not resolved in a recent Supreme Court case. The case itself did not directly involve TDRs; Mrs. Bernadine Suitum sued the Tahoe Regional Planning Agency, challenging the legality of the development restrictions placed upon her property.⁵² However, the lower courts held that the case was not ripe because Suitum did not apply for the TDRs the agency provided for compensation. The Supreme Court overturned this decision, deciding that the case was ripe; Suitum need not have applied for the TDRs before bringing suit. The case was then remanded back to the lower courts for their

⁵⁰ *ibid.* p. 94.

⁵¹ The fifth and fourteenth amendments to the United States constitution require "just compensation" for any regulatory taking. It is presumed that just compensation would be interpreted as full compensation. (R.P.A. 1998, p. 14).

⁵² *Suitum v. Tahoe Regional Planning Agency* (1997) as described in R.P.A. 1998, p. 14.

consideration. A concurring opinion joined by three of the justices found that TDRs constituted compensation rather than an alternative use, but the majority opinion did not address the issue. In future years, the resolution of this issue could drastically change the legal constraints surrounding TDR programs in the United States.

The United States compared to Canada -- the issue of takings

It is interesting to note the distinctions between the U.S. and Canadian legal philosophy regarding regulation. In the United States limiting the prerogatives of private ownership is either based on the government's police power or power of eminent domain. If it is based on the police power no compensation is required, whereas if based on eminent domain, compensation is required. How are the two distinguished? The rule of thumb is that "measures that prevent a landowner from imposing a harm upon his neighbors may be enacted under the police power; measures that compel him to confer a benefit upon the community must be enacted under the condemnation [eminent domain] power."⁵³

Based on the discussion above, it is clear that U.S. courts have determined that mandatory TDR programs are enacted under the eminent domain power, since the courts require compensation. However, the dichotomy is not so clear in Canada. Under Canadian law, only when property is expropriated is compensation required. Regulation does not require compensation when rights are taken for the common good, and the owner shares in that common good.⁵⁴ In British Columbia, municipal zoning regulations are explicitly exempted from compensatory obligations even if they result in reducing the value of property.⁵⁵

⁵³ Costonis. p. 15.

⁵⁴ Richard. p. 10.

⁵⁵ Buholzer. class notes 1/6/99.

Canadian municipalities are also less subject to judicial review.⁵⁶ Of course, in these litigious times, Canadian municipalities, too, are careful to rely on instruments that have been approved by the courts. Even in the absence of legal pressure, public disapproval and the political strength of the development community continues to make mandatory restrictions on public property problematic. Nonetheless, the differences discussed above would seem to indicate that Canadian municipalities have more latitude to experiment with innovative zoning.

TDRs and Zoning

In both countries a basic issue of TDR use has to do with the rationale for existing zoning. U.S. courts have found that it is permissible to waive zoning restrictions for reasons that further the public purposes underlying the restriction.⁵⁷ A classic example would be a municipality which allows a development to build to a greater density in return for a public park next to a development. Presumably the zoning was in place to allow sun and open space to permeate the neighborhood; by providing a park, the developer has furthered the public purpose underlying the restriction which has been relaxed.

This is a much hazier exchange in TDR programs. It is not clear if it is permissible to waive restrictions for public purposes unrelated to the public purposes underlying the restrictions. It also speaks to urban design issues: that is, is it fair that one neighborhood receives additional density, so another keeps its beautiful heritage buildings? Thus far, it seems courts are content to allow municipalities to decide these issues.

There is a related criticism of TDRs that has yet to be directly addressed by a court. Zoning restrictions are meant to be rationally imposed guidelines that

⁵⁶ Richard. p. 11-12.

⁵⁷ Ziegler. 1996. p. 166.

maximize the well being of a city. However, TDRs allow these guidelines to be systematically bypassed. In reality, this is not an overly dramatic shift; zoning restrictions are arbitrary, and few cities refuse the occasional exception. Nonetheless, it has been asked if a large TDR program would not seriously distort the urban fabric of a city, by systematically allowing zoning restrictions to be exceeded.

The legal case which seems most applicable is *Barancik v. County of Marin*, where it was found that if the overall level of density is the same "the county is rightly indifferent as to who does the development."⁵⁸ Hence, the courts have accepted that the urban design issues of TDRs are not insufferable. However, a legal decision does not overtly address the urban design implications of shifting density. These implications will be directly examined in the next section.

VIII. Urban Design Constraints and Issues in TDR Application

TDRs programs provoke a number of difficult urban design issues. The satisfactory resolution of these issues ultimately depend upon the individual TDR program and the planners who are implementing them. Nonetheless, several general observations are possible.

It was remarked above that courts explicitly support the relaxation of zoning restrictions for reasons that further the public purposes underlying the restrictions. This is based on the rationale that open space amenities have the capacity to "absorb" density. Clearly the use of TDRs, often generated in other areas of the city, does not justify a similar relaxation of restrictions. This has been referred to as the "Dr. Jekyll and Mr. Hyde" aspects of TDRs -- the unique, well-preserved heritage buildings in one neighborhood are made possible by the

⁵⁸ Ziegler. 1996. p. 165.

choked density of another.⁵⁹

This also relates to the issue of transaction costs. If buildings are allowed to exceed density restrictions, clearly the municipality will require significant oversight over these buildings. This oversight can lead directly to heightened transaction costs.

The way in which rights are valued also has urban design implications. If rights are simply sold as blocks of density one can assume that they will tend to accumulate in the area in which floor space brings the most value -- usually the central business district. Since central business districts tend to be already dense, such a system would have some unfortunate urban design repercussions. In the next chapter, several more-nuanced methods of transferring density will be explained.

The urban design challenges to a TDR program would appear paradoxical. An effective TDR program requires a city to allow the systematic violation of its zoning code, while maintaining a desirable urban fabric, and minimizing the discretionary nature of the review process. The answer is deceptively simple. The general zoning guidelines must be tailored to allow the existence of a TDR program. As I discussed in the section on scale concerns, this can be politically difficult. However, if a TDR program is to see a significant amount of use, and the overall level of density is to remain constant, simple arithmetic would dictate the necessity of downzoning certain districts.

IX. Conclusion

It is difficult to make any general statements with regard to the relationships between TDRs and these various objectives. In many significant ways these concerns overlap. Also, depending upon the specific TDR program different tradeoffs might exist between different goals. Nonetheless, a few

⁵⁹ Richard. p. 26.

general conclusions can be suggested.

The transfer of development rights is fundamentally a mechanism that redistributes the impacts of a policy which limits scale. TDR programs are based on the rights of land owners to be compensated for certain types of restriction on their land, and the ability of the municipality to allow zoning violations in return for gains to the public welfare. After an initial limit is set on the scale of development, TDRs redistribute the costs associated with the restriction.

Although market mechanisms are usually thought of as a means towards a more efficient outcome, in the case of TDRs their most notable effect would seem to be in this redistribution of costs. As will be seen in the next chapter, the large transaction costs associated with most TDR programs would seem to largely swamp the additional efficiency otherwise assumed to accrue to a market system.

Several times throughout this chapter it was reiterated that the ability of a TDR program to achieve its objectives depends upon the individual program's design. With the exception of the general observations just made, there is nothing integral to the nature of TDR which resolves the concerns discussed in this chapter. On the contrary, the attainment of the objectives depends upon the implementation decisions made in designing each individual TDR program. In the next chapter I will discuss these manifold policy levers of a TDR program. Integrated with this discussion will be references to other working TDR programs in North America, and the relationship of these policy levers to the goals discussed above.

Chapter 4 -- Implementing TDRs (Outline)

- I. Introduction
- II. Technical Issues Surrounding the Measurement and Use of Development Rights
- III. Adjacency Requirements
- IV. As-of-right or Discretionary
- V. A TDR Bank
- VI. Mandatory or Voluntary
- VII. Incidence of Costs
- VIII. The Relationship of TDRs to Other Policies
 - A. Incentive Zoning
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- IX. Synthesis and Review
- X. Institutional Guidelines for Designing Successful TDR Programs
- XI. Conclusion

Chapter 4 -- Implementing TDRs

I. Introduction

In the preceding chapter I explored the central objectives of TDR programs. In this chapter I will proceed to examine the ways in which TDRs have actually been implemented, focusing on the practical decisions which must be made in realizing TDR programs. Simultaneously, I will relate these methods to the objectives discussed above. Essentially this will constitute a survey of the most important variables in accomplishing a TDR program.

Peter J. Pizor differentiates between "first and second generation" TDR programs.⁶⁰ Pizor convincingly demonstrates a qualitative difference between those TDR programs initiated in the early 1970s and those implemented afterwards. There is little doubt that this is largely due to the lessons the planners of second generation programs learned from the successes and failures of first generation programs.

Much of the second generation programs' success is due to their more sophisticated nature, better allowing for real world complexities. This is not to say that they are more complicated, for one of the lessons learned from the defeat of the Chicago Plan was the public's distrust and dislike for complicated plans. Hallmarks of the most successful TDR programs have been well-structured, easy to understand plans, carefully explained to the public. Below, I will detail more specific lessons which can be gleaned upon examination of both first and second generation programs. The following chart summarizes the TDR programs to which the text refers in order to better facilitate the discussion for the reader.

⁶⁰ Pizor. p. 203.

Table 1*Summary of TDR Programs Mentioned in text⁶¹*

Location of TDR Program	Year Established	Acres preserved /level of use	Additional Notes
The "Chicago" Plan	n/a	n/a	proposed by John Costonis
New York, NY	1968	12 transfers	the first TDR program
Collier Cnty, FL	1974 (1979)	325 acres	successful 1st generation plan
Montgomery Cnty, MD	1980	29,000 acres (1994)	successful 2nd generation plan
New Jersey Pinelands	1980	12,000+ acres	successful 2nd generation plan
Marin Cnty, CA	1981	1 use	
Vancouver, B.C.	1983 (1996)	6 buildings preserved	see chapter 5
Washington D.C.	1984 (1991)	11 buildings sold rts	
San Francisco, CA	1985	10+ buildings saved	injured by growth cap in 80's
Seattle, WA	1985	9 buildings	rights are actively marketed
Tahoe R.P.A.	1987	30+ transfers/year	Suitum v. TRPA (see Ch. 3)

II. Technical Issues surrounding the Measurement and Transfer of Development Rights

In much of the literature, the use of TDRs is treated as a single generic possibility. In fact, there is a wide range of methods in which these rights can be treated. They can be transferred as density, as the sum of their value, as residential units or as some combination of these three referred to as a credit.

Density is the most intuitive way to deal with TDRs. At its most simple, a TDR scheme would work as follows: if a site's zoning permitted an FAR of nine but the site was only developed to an FAR of seven, the city would allow the site's owner to transfer the remaining FAR of two. The transferable FAR would be measured in the quantity of square feet which the additional FAR would have allowed. However, the amount of transferable floor space generated through this method would account for neither the additional costs of building higher,

⁶¹ Unless otherwise noted, level of use refers to the recorded level as of 1997. Year established denotes the year in which an official program was inaugurated. The intermittent year in parentheses indicates a year in which a fundamental change to the TDR program increased the level of use.

nor for the uncertainty of the market for TDRs. If the program is voluntary, particularly in an urban area, more sophisticated analysis will be necessary to generate the proper amount of FAR, sufficient to entice property owners to accept restrictions on their property without giving away more than is necessary.

For instance, assume a city wishes to utilize TDR for its heritage program. Essentially, the municipality must do a residual analysis of the property value with the heritage site and without the heritage site. It then asks the question: "how much additional floor space would be necessary to compensate the owners for the decreased value of their property?" Of course, this is a highly contentious process; at each step of the way the developers and the city planners can be expected to produce different values and construction costs. Nonetheless, that is one of the most common ways in which to appraise TDRs.

Other programs, particularly in rural areas tend to utilize a formula. In Collier County, Florida, TDRs are measured in residential units.⁶² For every acre of land preserved, one half of a residential unit is allowed to be transferred. The New Jersey Pinelands program is similar but even more complex.

The administrators of the Pinelands program first generated the total amount of development which could be handled in the receiving sites.⁶³ They then divided this development into development credits and awarded it to the owners whose land was to be preserved. A different amount of credits were awarded based upon the type of land. Agricultural lands, which could most easily be developed, were rewarded with the most development credits; wetlands, which could not be easily developed, were awarded fewer credits. Developers buy these credits and use them to build additional units on land designated as receiving sites. Due partially to the precision with which this

⁶² Roddewig and Inghram. p. 5.

⁶³ *ibid.* p. 6.

system was designed very little oversight is needed with regard to the use of the development credits.

Another method through which TDRs could be transferred was suggested by John Costonis in his Chicago Plan.⁶⁴ According to this plan, density would be transferred in terms of dollars. In this way, TDRs would be prevented from clustering in the most valuable areas of the city; like money, TDRs would not purchase as much space in the more expensive areas of the city. Hence, it would require less oversight to avoid clumps of density. Such a scheme has never been initiated, almost certainly due to the prohibitively complicated calculations it would require. It would require the city to precisely value the rights both at the sending and receiving sites. The idea of a market system of compensation is precisely to eliminate these prohibitively lengthy calculations.

It should be acknowledged that the residual analyses many voluntary programs use also require a good deal of market calculations. This makes the process far lengthier and more controversial than a constant formula. However, unlike the method suggested by Costonis, residual analysis only requires an analysis of the sending site. Also, it already enjoys widespread acceptance and familiarity within the real estate sector; this familiarity is crucial in encouraging this sector to take part in a TDR process.

III. Adjacency Requirements: Where can these rights go?

The issue of depositing development rights has peripherally been addressed above, but it requires more discussion. It is a central issue to any TDR program, especially in urban areas. There is a tradeoff involved -- if TDRs are required to remain adjacent to sending sites, urban design effects will be more controlled. However, the market will be limited, and the prices will be depressed. On the other hand, if rights can be deposited at large, unpredicted and

⁶⁴ Costonis. p. 28-65.

unpleasant concentrations of density might ensue. Once again, the best solutions are found in the newer TDR programs which incorporate these contradictory goals within their design.

TDR plans have spanned the gamut between strict adjacency requirements and a virtual free market in TDR rights. Most have reached equilibrium somewhere between the two. For instance, although New York City has broadened the permitted range of transfers beyond strictly adjacent properties, it continues to disallow area wide transfers except for specific cases.

Many programs have adopted sending and receiving districts. The Pinelands program involves a comprehensive regional plan for seven counties and fifty two municipalities.⁶⁵ Within this area there are designated sending districts, where development is severely restricted, and receiving districts, where development is meant to be concentrated. Washington D.C. makes a similar, if less extensive, use of sending and receiving districts.⁶⁶

There are two basic ways in which districts can operate. There can be a sending and receiving district, as in the two examples mentioned above. Alternately, there can be a planning district formed around the sending sites. This will keep the density close to its source, without the strict limitations of adjacency restrictions. This planning district can operate using density zoning, whereby there is a limit to the total density used in the district, within which owners can buy and sell density. The TDR program of Marin County, California is structured in such a manner; all of the properties within the eligible jurisdiction can send or receive density subject to a master plan.^{67,68} Notionally it resembles a tradeable permit scheme as the market is allowed free reign within

⁶⁵ Roddewig and Inghram. p. 5.

⁶⁶ Goodwin. A11.

⁶⁷ Ziegler. p. 149

⁶⁸ Pruetz. p. 277

an overall exogenous constraint. In practice, however, the member municipalities of Marin County have been slow to incorporate TDRs into their planning regime. Subsequently, there had been only one use of TDRs in Marin County as of 1997.

In the early days of TDR, many theorists suggested TDRs as a complete substitute for zoning.⁶⁹ There are at least three major reasons such a policy would be problematic. The urban design considerations alone make such a scheme impractical -- there are simply too many non-market considerations to allow the market free reign. There are also operational constraints. In such a pure TDR scheme, any changes to zoning would require a complete reallocation of development rights. This would make such a scheme prohibitively time consuming. Finally, such a complete TDR system would almost inevitably lead to more overall development. All possible development would take place, as any land owner with extra development rights would sell them.⁷⁰ For all of these reasons such a system remains unlikely.

IV. As-of-right or Discretionary

A central dilemma in every TDR scheme is the amount of discretionary review necessary. In light of the previous discussion regarding transaction costs, it is clear that the amount of discretionary review should be minimized as much as possible. However, a certain amount of discretionary review is usually thought necessary in order to maintain an area's urban form. Usually the more developed an area, the more discretionary review is necessary -- a development in a suburb requires less review than a development in New York City. The scale is larger in cities, and it is less feasible to simply guide development by formulas. Undoubtedly the lower transaction costs made possible by less

⁶⁹ Merriam. p. 100-101.

⁷⁰ Arik Levinson offers economic theory's confirmation of this intuitive conclusion. (Levinson. p. 283-296).

thorough discretionary reviews contribute to the advantage of rural programs.

However, with a carefully designed TDR program, cities can minimize the discretionary review required. If a city creates a properly underzoned receiving district for development rights, its planners can allow transfers into this district with no more of a discretionary process than is typically required of a development project. An extended discretionary review process is less necessary if the planners are comfortable with the maximum density the district could attain.

V. A TDR Bank

One of the most innovative items implemented by several of the second generation TDR programs was the establishment of a TDR bank. While only a handful of TDR programs use them, those that do are among the most successful. Both very successful TDR programs mentioned earlier, those of Montgomery County, Maryland and the Pinelands, New Jersey, found it useful to establish such banks after operating for several years without them.

TDR banks were initially suggested by John Costonis as a way to insure a constant market, and relatively constant prices, for development rights.⁷¹ Although there are several different ways in which such a bank could and has functioned, essentially a TDR bank would be created by the government to broker TDR transactions. The bank would buy development rights from land owners who were not able to sell them, and would sell them later, either at an auction or at some set price. The existence of such an assured market for TDRs would make land owners more likely to accept TDRs in a voluntary scheme of compensation, while in a mandatory scheme it would make courts more likely to accept TDRs as just compensation. For instance, the primary reason TDRs were rejected as compensation in the Tudor case mentioned above was the

⁷¹ Costonis. p. 42.

uncertainty attendant with their disposal.⁷² If New York had had a TDR bank in place, the court's opinion suggests that the decision would have been reversed.

The promise of TDR banks have been vindicated in practice. It was mentioned above that the TDR scheme of Seattle, Washington was frustrated by the low prices for which they were sold by the low income housing groups. It is impossible to say if this could have been avoided with the establishment of a TDR bank, but other cases would seem to defend this theory. The Pinelands program has had a TDR bank in place since 1981. The Pinelands bank set the price per credit at 10,000 dollars, based on the value to a developer of one additional unit of housing. This price had a notable effect on establishing price parameters; as of 1987, three fourths of all sales had taken place at this rate.⁷³

Another benefit of a TDR bank is its capacity to smooth over fluctuations in the demand. In times of scarce demand the bank can either offer a guaranteed fair price for rights or simply buy more rights to keep the market price from dropping. As mentioned above, if development rights are sold for too low of a price, the goals of a program may be compromised. Also, urban design concerns are intensified; as density becomes more easily obtained, land owners will require more density in order to be compensated.

Despite the evident utility of a TDR bank, the majority of TDR programs do not have one. This is probably due to the costs, or perceived costs, of implementing such a bank. In order for a bank to act as the buyer of last resort, it must have a fair amount of funds at its disposal. John Costonis argues that a TDR bank will pay for itself in the long run as it will earn money from selling the rights.⁷⁴ Nonetheless, a TDR bank requires an initial investment which may or may not be recouped, depending upon the success of the program.

⁷² Merriam. p. 207.

⁷³ Roddewig and Inghram. p. 6.

⁷⁴ Costonis. p. 52.

Dwight Merriam claims that a cheaper alternative to a TDR bank is to legislate the municipality's "right of first refusal."⁷⁵ Under such a system, city planners would specially designate certain properties which they feel may warrant preservation. Before the owners of these properties could sell them they would be required to give the city the right of first refusal to buy their development rights. This system would be legislated in concert with a voluntary program of TDRs. Hence, the program would usually be voluntary.

The aims of Merriam's suggestion are laudable. According to Merriam, it would lessen the strain on municipal finances while eliminating the effort wasted to preserve buildings which are in no danger. However, it would require a fair amount of discretionary review and create uncertainty in the real estate market. As I discuss in the next chapter, there are significant similarities between the operation of Vancouver's TDR program and Merriam's suggestion.

Merriam did not suggest the right of first refusal merely as a way of lessening costs; he also suggested it as a way of minimizing the mandatory aspects of a TDR program. In this sense, it addresses one more fundamental decision in implementing a TDR program. Should the program be mandatory or voluntary?

VI. Mandatory or Voluntary

Some proponents of TDRs argue that if a program is mandatory it will be ineffective. Others argue that a mandatory program is politically unfeasible, and even if it was feasible politically, fully compensating those injured would be economically unfeasible. In reality, the distinction between mandatory and voluntary programs is not always clear. It is widely agreed that, in order to be effective, a TDR program must place fairly strict development restrictions on sending sites. Depending on the harshness of these restrictions, such a TDR

⁷⁵ Merriam. p. 133-139.

program, although technically voluntary, may be described as mandatory. The choice between mandatory and voluntary should be seen more as a spectrum than as a dichotomy.

The question remains: how strict should these restrictions be? Clearly, the answer depends upon the situation; however, certain broad statements can be made regarding the link between a program's goals and the strictness warranted. Strict restrictions are most warranted for programs which aim to conserve farmland and/or preserve the environment. As Peter J. Pizor writes, "TDRs will preserve land only where prohibitions on development are comprehensive and mandatory."⁷⁶ Such programs require a certain critical mass of undeveloped land in order to be successful. A patchwork pattern of development will destroy a threatened ecosystem as surely as a more comprehensive pattern of development.

The goals of preserving heritage or non-market housing, on the other hand, may not require as comprehensive restrictions. The attainment of these goals is not threatened by more patchwork successes. The destruction of one heritage site does not effect the preservation of another.

Costs must also be considered. The costs are likely to be much higher to enforce mandatory restrictions on programs with the goals of heritage preservation and/or non-market housing. Such TDR programs will generally be found in urban areas, whereas TDR programs to protect agricultural land or sensitive ecosystems will be found on the urban fringes. Since the economic and political costs of mandatory restrictions are likely to be far greater in urban areas, it is not surprising that programs with the goals of preserving heritage and/or non-market housing are generally less mandatory than those with the goals of preserving farmland and/or sensitive ecosystems.

⁷⁶ Pizor. p. 210.

The strictness with which development is restricted can reasonably be held responsible for the fact that the TDR programs which have seen the most use are those with the goals of preserving agricultural land and/or the environment. This is true of the most successful second generation programs -- i.e. those of the Pinelands and Montgomery County. This trend is also exemplified by the first generation TDR program of Collier County, Florida. One of the most successful first generation programs, Collier County's program possessed among the strictest provisions against development in the sending district.⁷⁷

VII. Incidence of Costs

The policy levers thus far discussed have been most notable for their impact on the level of a program's use or transaction costs. They have only peripherally affected the crucial goal of a fair distribution. Through what mechanisms can the fairness of TDR policy be addressed? This objective can be directly impacted by the incidence of the costs. That is, when the administrators of the program implicitly decide by who the costs will be bore, they largely determine the fairness of the program.

There are several different components of the incidence of costs. The most direct is related to the program's funding. If a city's TDR program is funded by the state or provincial government, the benefits of the program are only enjoyed by some of those who bear the costs. This disassociation of the costs and benefits of a program is viewed as unfair by some, particularly if those who enjoy the benefits of the program are also not financially poor. Most TDR programs tend to be funded locally or regionally. In any case, a properly functioning TDR program should require minimal public funds to administer, far less than an alternate method accomplishing the same goals. Of course, it is this low cost of TDR programs which led to their initial design and implementation.

⁷⁷ Pizor. p. 204.

Less directly, the costs of most TDR programs are somewhat borne by developers, as they are essentially forced to pay for relaxations they might otherwise have attained without charge. This arguably leads to a more fair distribution, as the public is reaping some benefit of the increased value of land which stemmed from a public action. Developers might contend that the additional cost will simply be passed on to the eventual purchaser of the property; as mentioned in the previous chapter, these contentions should be amenable to economic analysis. In certain TDR programs with the goal of preserving a resource, these costs could be addressed through the incorporation of PDRs, whereby the government purchase of development rights would redirect the costs of preservation towards the public.

An even less direct cost stemming from TDR programs are the lower values associated with a neighborhood's densification. Although properties zoned to higher densities tend to be more valuable than those zoned to lower densities, density tends to decrease the per foot value of a building's floor area. Hence, property around receiving sites would tend to get less valuable. These costs need not apply if the program is based on sending and receiving districts, as all properties within the receiving district will have heightened value due to the additional densities possible to them.

VIII. The relationship of TDRs to other policies

The early success of the Collier County initiative mentioned above came to an abrupt halt with the passage of Florida's Growth Management Act in 1985. Values for development were distorted to such a degree that TDR transactions were no longer considered viable.⁷⁸ Although in the subsequent decade the market has somewhat recovered, this phenomenon relates to one more important aspect of implementing a TDR program -- it is crucial to examine the

⁷⁸ Heiberg. p. 35.

relationship of TDR programs to other policies.

A successful TDR program must be integrated into a comprehensive growth and development policy. This integration should be implemented on every level. The zoning of sites which might receive TDRs should allow relatively low densities so the sites are not overburdened. That is, the allowed density should be sufficiently low that even the addition of transferable density does not create a problematic concentration. These receiving sites must also be given sufficient infrastructure to support the additional services required by new developments. Furthermore, there are several particular policies whose relationship with TDR bears examination.

Incentive Zoning

The policy which is probably most related to TDRs is that of incentive zoning. Incentive zoning, also known as amenity bonusing, is a planning practice closely related to TDRs. Cities which practice amenity bonusing award additional density to a development in return for the provision of a community amenity such as a plaza or a park. Amenity bonusing has an interesting relationship to TDRs.

Both schemes address the windfall issue; in both cases developers are forced to pay for the windfall profits derived from an upzoning. Amenity bonusing allows developers to pay for density in the currency of community amenities; TDRs allow developers to pay for density in simple currency. The more significant distinction is who the developer pays. Whereas under amenity bonusing it is the community itself that is "paid", TDRs direct the payment to the private owner of the not-completely-developed land. Hence, although both schemes mitigate windfalls, a TDR scheme also mitigates wipeouts, whereas an incentive zoning scheme does not.

It can be problematic to utilize both TDRs and amenity bonusing at once. Amenity bonusing increases the supply of development rights; as in any market, increasing the supply lowers the equilibrium price. The greater the density permitted in any given jurisdiction, the lower the price that will be offered for development permits. This price decrease has a direct result on the efficacy of a TDR program.

This dilemma has long been recognized by planners. As early as 1974, John Costonis warned of the danger liberal FAR bonuses represented to TDR plans.⁷⁹ Costonis suggested several ways in which TDR bonuses could be strengthened vis a vis amenity bonuses. Developers might be allowed to use TDR bonuses to not only add density to their building, but to allow greater tower coverage. Alternately, it might be mandated that developers look to TDRs for a certain percentage of any bonus. Finally, of course, the amenity bonuses could simply be awarded less liberally.

Most second generation plans chose one of the latter two options. Before implementing the Pinelands TDR scheme, New Jersey planners insisted that all member municipalities eliminate the zoning bonuses previously available.⁸⁰ Similar changes were implemented in Washington, D.C., San Francisco and Seattle prior to establishing a TDR program. Seattle and San Francisco also incorporated provisions to the effect that TDRs must be used in order to reach the maximum density possible.⁸¹

Seattle's scheme is especially noteworthy for its nuances. The Seattle plan lowered base FARs in the office core to ten, and institute a new tiered bonusing system through which additional density could be obtained. Developers can increase the FAR to thirteen through any of a number of general bonuses.

⁷⁹ Costonis. p. 85.

⁸⁰ Roddewig and Inghram. p. 6.

⁸¹ *ibid.* p. 10-12.

However, the FAR can only be increased to fifteen through the use of bonuses derived from affordable housing or TDRs generated from affordable housing or heritage preservation. FARs can be further increased solely through the use of TDRs generated from low income housing, or through actually building low income housing. This policy has had the effect of creating a thriving market for TDRs in Seattle.⁸² Lamentably, as described in chapter three, the low income housing corporations have competed so enthusiastically to sell their rights that prices have been driven lower than expected.

Regulating Growth

As in the example of Collier County, several TDR programs have been hampered or altogether destroyed by a growth strategy plan which ignores them. For instance, if regulations prevent development from occurring in certain areas, no TDRs will be used in those areas. It is simple enough to incorporate a TDR scheme into a growth strategy plan. Certain areas will be designated growth areas, and underzoned sufficiently to allow the utilization of TDRs. Of course there may be political difficulties in downzoning; however, if it is politically feasible to restrict growth altogether, presumably it is also possible to underzone a district.

San Francisco's laudably constructed TDR program was made utterly ineffective by a cap on growth passed soon after its implementation. In 1985, San Francisco passed its first downtown plan incorporating TDRs. The same plan lowered base FARs, eliminated most incentive zoning and required the use of TDRs to reach maximum density. All of these measures would be expected to create a thriving market for TDRs in San Francisco. However, this innovative program was rendered impotent by a concurrent three-year limit on growth. A subsequent economic downturn led to such a plethora of vacant office space in

⁸² Pruetz. p. 234.

downtown San Francisco, that the future of the program seemed uncertain until a combination of changing economic and policy conditions revitalized the program.^{83,84}

It should be noted that such exogenous economic conditions can upset even the best designed TDR program. Even if San Francisco's growth plans had allowed for TDRs, in all likelihood the economic recession would have prevented their use. Likewise, the limited use of TDRs in the initial years of Washington D.C.'s program was doubtless due to the general recession in the area.⁸⁵ The demand for TDRs is based upon the demand for real estate. In times of recession it is unlikely that demand would be sufficiently high to generate interest in TDRs.

The problem can be mitigated, however, by a well-designed TDR program. A TDR bank can smooth over ebbs in the market; during recessions the bank can buy rights which it will sell during the eventual economic upturn. A mandatory program with sufficiently stringent development restrictions will generate a TDR market except in the most severe of recessions, when development is simply not occurring. In any case, though, the importance of exogenous conditions must be recognized.

IX. Synthesis and Review - Attaining the Objectives

Certain tradeoffs in designing a TDR program can be recognized. Thus far, I have identified the major issues of each decision juncture, and placed them in the context of the successes and failure of past TDR programs. In this section I will synthesize the above discussion and summarize the conclusions.

Before discussing the actual policy levers, however, it is worth reiterating a point discussed in the last chapter. Different goals warrant different techniques.

⁸³ Roddewig & Inghram. p. 11.

⁸⁴ Pruetz. p. 227.

⁸⁵ Goodwin. p. A11.

TDR programs which take place in more rural environments tend to see more transactions than those implemented in cities. For a variety of reasons, TDR programs in rural areas require less complexity and are politically more feasible. It is crucial to remember the specific program's geographic context and goals when determining the details of the TDR program.

Technical Issues Surrounding the Measurement and Transfer of Development Rights

Various techniques exist for measuring development rights. Simple techniques reduce transaction costs, and create a more impartial program in application. However, the more voluntary a program, the more complex the techniques which will be necessary, as the process must offer property owners sufficient compensation to convince them to participate in the program without giving away more than necessary. Some complexity might be necessary even in a mandatory program in order to guarantee a program's political feasibility.

Hence, there are several tradeoffs made in resolving the technical issues surrounding a TDR program. Complicated inter-related tradeoffs exist between the goals of minimizing transaction costs, maintaining a politically feasible program, controlling the extra density permitted, and encouraging the program to be used. Essentially, a balance must be struck between arriving at the appropriate compensation and streamlining the process.

Adjacency Requirements

Strict adjacency requirements unnecessarily limit demand for TDRs; however, too lenient requirements might require a cumbersome discretionary process to prevent unfortunate urban design outcomes. This conflict can be resolved by underzoning a receiving district, which can then be allowed to accumulate density with minimal discretionary review. However underzoning

a district imposes a cost on all of the property owners within the district. As long as they are still allowed a reasonable economic gain from their property, this might be considered acceptable.

There is a threeway tradeoff visible in this issue. There is the initial tradeoff between controlling the scale of the program (maintaining a good urban fabric) and the heightened level of use possible without adjacency restrictions. However, the consistency of the urban fabric can be protected with appropriately designed underzoning. This, in turn, requires tradeoffs between scale and distribution, as the underzoning has distributional implications.

As-of-right or Discretionary

Discretionary review requirements often create large transaction costs to participate in a program; also, such program are subject to charges of partiality. As-of-right programs can be inflexible and they might lead to inappropriate density within a city. Determining the correct level of discretionary review thus requires tradeoffs between the objectives of a fair application of the policy, minimal transaction costs and efficiency, on the one hand, and political feasibility, flexibility and scale concerns on the other. One way of balancing these conflicting imperatives is through the use of receiving and/or planning districts. These districts minimize the need for discretionary review, by incorporating scale concerns into the program.

A TDR Bank

Most of the TDR programs which have seen the most use have TDR banks. In a properly structured program, they smooth the ebbs and flows of the market, and insure a just compensation of affected land owners. They also act as an efficient broker of transactions, and encourage a larger market in TDRs. The only apparent tradeoff is the investment of public funds necessary to establish a

TDR bank, and a certain level of sophistication necessary to administer it. Until a TDR program reaches a certain critical size, it may not be cost efficient to establish a bank.

Mandatory or Voluntary

TDR programs involving mandatory restrictions on development are less politically feasible, but provoke more TDR transactions. Most objections to TDR programs, and all legal challenges have been in response to related restrictions on development. The resistance to these programs stems from the distributional effects of limiting development. Due to the larger amount of use seen by mandatory programs, they tend to be more successful than voluntary programs in attaining their goals. Strict restrictions are both more necessary and more possible for rural programs than urban programs.

Certain tradeoffs are clear in the decision to make development restrictions mandatory -- a certain amount of political feasibility is traded to encourage a higher level of use. The crux of the decision, however, lies with the underlying assumptions regarding a "fair" distribution. Stricter development restrictions assume it is fair to take some value from property owners for the public good. Voluntary programs inherently assume that owners should be bribed to further the public good, rather than simply ordered to do so. As discussed in Chapter 3, the difference involves a fundamental difference in philosophy.

Incidence of Costs

A variety of distributional tradeoffs are related to the incidence of costs. For instance, if a TDR program is financed and administered by a state/provincial agency, but the main benefits are the residents of a certain agricultural area, this might be considered unfair. Such links should be

remembered in financing a program.

Incentive Zoning

Simultaneously utilizing both incentive zoning and TDRs can decrease the efficacy of both. Incentive zoning must be limited, if TDRs are to be used successfully. A program of incentive zoning and TDRs should be integrated in such a way that the practices which a city wishes most to encourage are highly rewarded by the program. A nuanced program of this sort might make the use of TDRs purchased from heritage buildings necessary to attain the maximum FAR possible.

Regulating Growth

TDR programs should be coordinated with a city's or region's growth strategy plan. If they are not, the program may be rendered useless.

Good Facilitation

The points summarized above are crucial to designing an effective and fair TDR program. However, perhaps the most important key to the success of a TDR program has not yet been mentioned. Good facilitation is crucial to a program's success. Information must be made easily available, and the process through which TDRs are transferred must be clearly explained. The administrators of the most successful TDR programs identify the thoroughness with which the planning staff brokered transactions as key to the success of their programs.⁸⁶

X. Institutional Guidelines for Designing Successful TDR Programs⁸⁷

Above I have focused on the design and implementation of a successful TDR program. Clearly, however, the institution which administers the program and the resource problem that the program addresses are also relevant. In a 1989

⁸⁶ Pizor. p. 207.

⁸⁷ The bulk of this discussion is drawn from an article by James Tripp & Daniel Dudeck. (Tripp & Dudeck. p. 369-391.)

article, "Institutional Guidelines for Designing Successful Transferable Rights Programs," James Tripp and Daniel Dudek describe these additional aspects for a successful TDR program.⁸⁸ For the most part these guidelines are very straightforward; nonetheless, their neglect could jettison an otherwise faultless TDR program.

Tripp and Dudek mention the following six characteristics with regard to the institutional framework and the natural resource problem being addressed: i) The administering agency must have clear legal authority to generate the TDRs and to implement and enforce the program. ii) The agency responsible for the program must have the technical capability to design and implement it. iii) The program must be evasion proof. The use of transferable rights should be the only way to exceed the resource limits that otherwise apply. iv) The program should have clearly specified objectives. v) TDR programs work best when applied to a resource problem with regional significance. vi) The resource problem must be defined in such a way that the transferable rights have economic value, and that incentives to buy and sell them exist.

XI. Conclusion

In this chapter, I have reviewed the components of a successful TDR program. It is crucial to realize that these decisions are political. Although they involve complex technical analysis, ultimately they are based upon political feasibility and the political will of the constituent population.

In the next chapter I will place Vancouver's TDR program in the context laid out above. After reviewing the use of TDRs in Vancouver, I will discuss the reactions of Vancouver planners and developers to TDRs. Additionally, I will suggest some additional uses of TDRs in Vancouver.

I will also evaluate the success of TDRs in Vancouver. Has the TDR

⁸⁸ Tripp & Dudek. p. 369-391.

program of Vancouver achieved its goals? Why or why not? I will review some of the key tradeoffs, as well as the equity implications of the program. Additionally, I will discuss the underlying attitude towards property rights that is evident in Vancouver's TDR program.

Chapter 5 -- Vancouver's Transfer of Density Program (Outline)

- I. Introduction
- II. History of Policy in Vancouver
- III. Transferring Density in Vancouver
 - A. Summary
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 - A. Attainment of the General Policy Objectives (tradeoffs)
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Chapter 5 -- Vancouver's Transfer of Density Policy

I. Introduction

Recently, Vancouver's TDR program has become a highly visible adjunct of Vancouver's efforts at heritage preservation. It will soon become even more visible, with the construction of the Wall Centre in downtown Vancouver. At 450 feet, the Wall Centre will be the highest structure on the Vancouver skyline, incorporating almost 250,000 square feet of transferable density.

Perhaps due to this additional exposure, TDRs have become an almost common suggestion for dealing with municipal problems in Vancouver. In recent months plans involving TDRS have been proposed in many different contexts: to preserve neighborhoods from further development;⁸⁹ as a remedy to loft developments which find themselves in violation of city density specifications;⁹⁰ and as a possible source of non-market housing.⁹¹ Before proceeding with such new uses of TDRs in Vancouver it is crucial to critically assess Vancouver's ongoing transfer of density program. In this chapter, the actual practice of TDRs in Vancouver will be examined in light of the theoretical and practical analytical frameworks discussed in preceding chapters.

II. History of Policy in Vancouver

The original Vancouver city policy providing for the use of TDRs was passed in 1983.⁹² For the first decade there was no density transferred, although the policy did see some marginal use as buildings swapped commercial and residential uses.

⁸⁹ Rasheed. interviewed March 16, 1998.

⁹⁰ Appelbe. p. 13.

⁹¹ City of Vancouver Community Services Group. *Non-Market Housing in the City of Vancouver 1953-1995 (Excerpt from the 1996 non-market inventory)*.

⁹² Even before the passage of the policy, transfers of density could tacitly occur in Vancouver through the use of simultaneous rezonings. Such transfers were rare and difficult to accomplish, though, and have little relevance to an analysis of the transfer of density policy.

Vancouver planners and developers have suggested several reasons for this initial low level of use in Vancouver. When the policy was first implemented, there was little demand for extra density in Vancouver. The demand for high density office space decreased and it was some years before the increased demand for high density residential took its place.⁹³ Perhaps more importantly, there was a widespread skepticism and reluctance to utilize TDRs on the part of the development community. As I discussed in chapter two, many early TDR programs were crippled by this skepticism. The natural hesitation to use new planning tools was compounded by the complexity of Vancouver's transfer of density program. Initially, any developer wishing to use transferred density was required to undergo an onerous process of rezoning, including a public hearing, before actually receiving the additional density.

Due to a combination of these factors, very few density transfers occurred before 1996. In January, 1996 the process of transferring density was significantly simplified; rezoning was no longer required for every transfer, and hence the transfer process became both shorter and more predictable.⁹⁴ The simpler rules for transfer, coupled with growing public acceptance of the mechanism has led to a relative plethora of transfers in the last two years. Currently, the growth in TDR transactions would appear to be unaffected by the slowdown in Vancouver's economy.

III. Transferring Density in Vancouver

Summary

Vancouver's TDR program provides for the transfer of density between sites in downtown Vancouver, south Granville Street and west Broadway. Transfers are allowed only in the pursuit of certain city goals. Depending upon

⁹³ Beasley. interviewed August 4, 1998.

⁹⁴ City of Vancouver Policy Report. January 22, 1996. (recommendations passed January 30, 1996).

the goal being pursued, different rules apply to the transfer. For reasons explored below, TDRs in Vancouver have almost wholly been used as an instrument of heritage preservation. Hence, a basic understanding of Vancouver's heritage conservation program is essential to a comprehensive description of its use of TDRs.

Vancouver's Heritage Preservation Program

In April, 1983 the City Council of Vancouver initiated a Heritage Conservation Program. The purpose of the program was to "identify the city's heritage resources, develop incentives to assist in the conservation of those resources, and to create a greater awareness and understanding of our built heritage."⁹⁵ For these purposes, several instruments of heritage preservation were enabled.

The fundamental tool by which the city administers heritage properties is the heritage register, a list of approximately 2000 properties in Vancouver deserving of protection. About ten percent of these properties are currently protected from development. Although a handful of these have been protected due to the spontaneous actions of their owners, the bulk of the properties have been protected as a consequence of attempted redevelopment. There are three categories in the Vancouver heritage register. The most important heritage properties are on the A list, with the less and least important properties on the B and C list respectively.

When any property on the heritage register files for a redevelopment permit, the heritage section of the planning department is notified. All properties on the register are forbidden to demolish heritage buildings until they have a redevelopment permit. This creates some bargaining ability on the municipality's part. Although ultimately it cannot reject the redevelopment

⁹⁵ City of Vancouver Community Services Group. *Heritage Fact Sheet 1*.

permit simply to preserve heritage assets, the demolition delay gives the city a chance to negotiate with the owner. A variety of incentives are available to convince the owner to voluntarily protect a heritage asset.

In Vancouver, density bonuses have been one of the most useful tools with which to compensate property owners for development restrictions.⁹⁶ Density bonuses allow developers to build to a higher overall density on the site as long as the heritage asset is left undisturbed. Thus, the result of conserving a small building may be very tall buildings surrounding it. Buildings on the A list are automatically considered for density bonuses, whereas buildings on the B and C list must be given council approval before being considered.⁹⁷ This is largely a formality, however, as the council has never rejected a consideration of the bonuses.

Vancouver has been unusual and fortunate with regard to its ability to preserve heritage through density bonuses. In recent years the demand for extra density in the downtown has been sufficiently intense to make density bonuses very valuable to developers. Other cities have had to use grants and tax incentives to coax people to preserve heritage. This is considerably more expensive; density is far less costly than actual fiscal resources. As discussed elsewhere, increasing a city's density may actually benefit the city. The money or density given to the property owner must be more than that which is necessary simply to compensate the owner for the restrictions on the heritage building. Additional resources must be granted to allow the upgrading of the heritage building to contemporary building standards. Relaxations with respect to the building code are also often granted to make this upgrading less expensive.

In the course of the last fifteen years, the legal techniques used to

⁹⁶ McGeough. interviewed August 20, 1998.

⁹⁷ *ibid.*

formalize protection of the heritage building have evolved. At first, binding heritage designations were used in concert with relaxations and rezoning. More recently, Heritage Revitalization Agreements (HRAs) were legislated by the province. They allow "one-stop shopping" in that they restrict development while allowing relaxations in the same instrument. However at the time of this writing, HRAs are still used in concert with heritage designations, as their legal validity is not entirely certain.

HRAs are important with respect to TDRs in that they eliminated the need to rezone the sending site each time it sold density. Recent changes in the TDR by-laws have also made rezoning the receiving site unnecessary as long as the total density was increased by less than ten percent. Thus, recently, the time-consuming process of rezoning has been made entirely unnecessary in most TDR transactions. This change is almost certainly a factor in the increased use of TDRs in Vancouver.

Generally, Vancouver planners are reluctant to allow density to be transferred. When possible they encourage on-site use of density. Only rarely is a property owner allowed to transfer all of the residual and bonus density from a given piece of land.⁹⁸ In Vancouver, the Stanley Theatre and the old Vancouver public library are the sole cases where the city allowed the full bonus and all the residual density to be transferred.

Although Vancouver heritage planners are hesitant to use density transfers too liberally, they do value them for their ability to distribute heritage density bonuses away from the heritage site.⁹⁹ Huge buildings surrounding heritage sites can diminish the effect of the heritage buildings; hence, in some situations it is counterproductive to reward developers with density which can

⁹⁸ Residual density refers to the difference between the allowable density of a property and the density to which the property is actually built.

⁹⁹McGeough. interviewed August 20, 1998

be used on site.

Although TDRs have seen marginal use thus far in Vancouver, they have been important in preserving the most vulnerable buildings. It is likely that their importance will be heightened as the transaction costs continue to decrease, and they see more use.

IV. Contextualizing Vancouver's TDR Program

In chapter four I outlined a series of implementation decisions planners must make when they design a TDR program. In this section I will discuss the decisions made by the designers of Vancouver's program. The discussion in Chapter Four offers significant insight into Vancouver's transfer of density program.

Goals

The six goals of Vancouver's program are outlined in the 1983 Transfer of Density Policy and Procedure. They are as follows: the preservation of heritage buildings; the creation of desirable public open space; the facilitation of development in areas with mixed use zoning; improved urban design; the protection of views in Downtown South; and to help protect existing Single Room Occupancy (SRO) stock in Downtown South. In the first fifteen years of the program's existence it has been primarily utilized to protect heritage sites.

There are several reasons this has occurred. As will be discussed below, the policy allows far greater latitude in the use of density transferred for this purpose. The city's motives in permitting this greater latitude is clear. Whereas the other goals can largely be fulfilled through on-site bonuses, preserving a heritage amenity can preclude an on-site bonus. Permitting very large buildings adjacent to the heritage building might obscure or destroy the very heritage amenity the bonus was supposed to protect. Transfers of density largely avoid

these problems. Bonuses can be issued to the owner of heritage sites without fear that they will have a destructive impact on the heritage building.

Technical Issues Surrounding the Measurement and Use of TDRs

Vancouver allows the actual transfer of density in an extremely simple exchange. Density is directly transferred on a square meter per square meter basis. That is, no ratio is applied, nor are there different rates for different areas of the city. This simplicity is somewhat belied by the calculations done previous to the transfer. In the past, the owners of the sending sites have always received a carefully calibrated heritage bonus before any transfers. Thus, they have always had more than the residual density to transfer.

As described above, the City of Vancouver offers density bonuses as incentive to preserve heritage. These bonuses are calculated through a complex residual analysis, with the intent to bonus sufficiently to completely compensate the land owner for accepting a restriction on the land without granting more density than is required for this purpose. The reward is typically based on the difference between the use possible while retaining the heritage building and the most profitable use of the property. The use of transferable density can be expected to require larger density bonuses, as transferable density is valued less than on-site density.

Additional considerations are also factored into the calculation of the bonus, depending upon the case. The bonus might be heightened in order to preserve a certain use of the heritage building. For instance, in the case of Vancouver's Stanley Theatre, the bonus was increased in order to permit the building's continued use as a theatre instead of a commercial building.¹⁰⁰ Alternately, if the building is generating income, the planners might provide a smaller bonus.

¹⁰⁰ Bancroft-Jones. Interviewed August 7, 1998.

Transfers of density are allowed only when the bonus density cannot be practically used on the same site as the heritage building. Although the transfer itself is simple, they are preceded by a good deal of negotiation and analysis regarding the size of the bonus to be transferred. In the Canadian Linen building case discussed below, the initial bonus was increased after the entire transaction was concluded, in order to mitigate a developer's discontent with the outcome. These negotiations constitute very large transactions costs; until the process is somehow refined, the necessity of these negotiations makes the transfer of density practical only for very large projects in the central business district.

The Vancouver program does not distinguish between different areas of the downtown in allowing the density to be transferred. This has been recognized as a potential problem by Vancouver planners, due to the resulting tendency of density to flow to the most expensive areas of the downtown. Given the limited application of TDRs in Vancouver this has not yet been a problem. However, as density transfers grow more common, several planners have suggested revisiting the issue. Presently, planners are empowered to refuse density transfers if they feel the overall supply of density has become too large; arguably, this task could be made less necessary with a more nuanced way of valuing or transferring density.

Adjacency Requirements

The adjacency requirements vary with the goal being pursued. If the density is being transferred in order to preserve heritage the adjacency requirements are fairly minimal, providing that the transfer takes place within the city center, south Granville or west Broadway districts. If the density is to be transferred pursuant to an urban design improvement, the sites must be within the same block or separated only by a single street. Presumably this strict

requirement stems from the concept of the sending site "absorbing" the excess density incorporated into the receiving site. Density transferred for any of the other goals is subject to adjacency restraints somewhere between the minimal level applied to heritage and the strict ones required for urban design improvements.

This difference in adjacency guidelines allows an excellent example of the relationship between the level of regulation and the level of use of a TDR program. In Vancouver, the use of TDRs for urban design purposes carries with it a much higher level of regulation than their use for heritage purposes. Presumably as a result, TDRs in Vancouver have been almost solely used for heritage purposes. This illustrates exactly the tradeoff one would expect between the level of use and the level of regulation in a TDR program.

As-of-right or Discretionary

Any transfer of density in Vancouver involves some degree of discretionary review. The degree of discretionary oversight varies with the amount of density being transferred. Originally, all density transferred required a rezoning of the receiving site. Given the burdensome nature of such a rezoning, in 1996, the city council allowed heritage density to be transferred without rezoning the receiving site. Provided that the density transfer increases the maximum density of the site by less than ten percent, no rezoning is necessary. The process remains discretionary; the approval of the development board must be obtained, but the process is significantly less cumbersome.

As mentioned above, in addition to the discretion involved in the process itself, planners also have the discretion to refuse a transfer of density, simply based on market conditions. This is a particularly troublesome form of discretion, in terms of fairness. The same transfer of density might be approved

or rejected by the same planning department, based only upon the timing of the application. As discussed in chapter three, one of the chief attributes of a fair policy, mentioned consistently by both developers and planners, is the ability to apply a policy consistently.

Two points should be made about this flaw in Vancouver's system. Instituting a TDR bank would give the planners more control over the market without requiring this problematic form of discretion. Also, it should be noted, that notwithstanding the theoretical problems arising from this provision of the policy, it has yet to be used. Given the small amount of buildings currently eligible to transfer their density and the scarcity of rights currently available in the Vancouver market it would seem unlikely that Vancouver's market will be overwhelmed with transferable density in the near future.¹⁰¹ Nonetheless, the provision constitutes a flaw in Vancouver's design which should be remedied if the program is to be expanded.

TDR Bank

When Vancouver planners refer to the existence of an "informal" TDR bank they are referring to a combination of two discrete aspects of the transfer of density program. Land owners who have been allowed to transfer their density are permitted to bank their excess transferable density through an instrument known as "development limitation covenants." These covenants record exactly how much density they have left to transfer; each time the land owner sells density the covenants are amended to take this into account. Planners also refer to the records kept of available transferable density as an informal density bank.

These existing "banking" policies, have significantly improved the Vancouver market for development rights. The ability to save development rights for future sale has reassured property owners concerned with the future

¹⁰¹ Beasley. interviewed August 4, 1998.

value of their development rights, and the status reports detailing where development rights are available in Vancouver have made the market notably more fluid.

Nevertheless, both of these techniques clearly lack one of the most important attributes of a true TDR bank -- the capacity to buy and sell rights. This capacity, through which planners can influence the price and supply of transferable density, is entirely lacking from the Vancouver scenario. Creating a TDR bank may solve many of the technical problems of Vancouver's program. Still, given the current limited use of density transfers in Vancouver, arguably the administrative costs of running a density bank outweigh the benefits. This issue has been discussed in Vancouver since the concept of a TDR program was first broached in the late 1970s.¹⁰² At that time it was recommended to forego the creation of the bank due to its evident complexity. It would appear timely to reexamine this decision in light of the last two decades of experience with TDRs, both in Vancouver and elsewhere.

Mandatory or Voluntary

Vancouver's transfer of density program is completely voluntary. As described above, whenever any properties on the heritage list are flagged, heritage planners approach the property owners and attempt to negotiate development protection for the heritage asset on the site.

In some sense, this aspect of the Vancouver system is similar to Dwight Merriam's "right of first refusal" discussed in chapter four.¹⁰³ In both schemes government intervention occurs only when necessary. However, whereas Merriam envisions a system where the government acts only when the market mechanism (TDRs) fails, in Vancouver, each vendor of TDR requires prior

¹⁰² City of Vancouver's Manager's Report. May 6, 1997. Appendix V. p. 7

¹⁰³ Merriam. p. 133-9.

government permission. That is, the framework suggested by Merriam includes a functioning TDR program which provides for the default private sector purchase of most development rights, without the requirement of government intervention. The government would act only when the private sector does not provide sufficient demand. In essence, Merriam's scheme situates the government as a last-resort purchaser of transferable density, whereas the Vancouver government acts more as a constant moderator of the scheme.

Relationship of TDRs to Incentive Zoning

Incentive zoning remains the primary tool for negotiation between developers and planners in Vancouver. TDRs have been used in only a handful of cases. Although they are widely expected to see more use in future years, for the present they are clearly subordinate to incentive zoning. Incentive zoning offers a more straightforward and more widely understood method of obtaining additional density, so it is not surprising that they are preferred to transferable density.

In many cases it is forbidden to use both TDRs and incentive zoning to bonus a development, and in such cases, incentive zoning is almost always the simpler method of obtaining bonuses. As long as the process of transferring density remains fraught with discretionary review, it is likely that it will see less use than incentive zoning. As discussed in the last chapter, TDR experts such as Tripp and Dudeck have argued that an effective TDR program requires that there be no alternate means of obtaining density increases in a given jurisdiction.¹⁰⁴ However, insofar as the municipal goals are served through incentive zoning, it is unclear if the flaw is a major one. That is, incentive zoning would seem to offer an acceptable alternative route to the many of the same objectives that Vancouver's TDR program addresses. Even analyzing the two tools separately is

¹⁰⁴ Tripp & Dudeck. p. 375.

problematic; in practice, every use of transferable density in Vancouver has occurred in concert with density bonuses.

IV. Additional Issues in Vancouver

Price

In chapter three I discussed the economic constraints on a TDR program, focusing on factors which influence their supply and demand. As any introductory economics text would attest, the best indicator of the interaction between the supply and demand for a commodity is its price. In this light, it is useful to examine the evolution of the price for TDRs in Vancouver.

Initially the price for transferable density, measured in terms of floorspace, tended to be discounted about 25% under the market price for floorspace. Although the discount may have been expected to dwindle as the market became more familiar with transferable density, in fact, it has grown to an estimated 40-50% discount.¹⁰⁵ This is thought to have occurred due to the increase in vendors of transferable density. Given the limited use of TDRs in Vancouver, it would seem a mistake to assign too much significance to such early pricing trends. In any case, it is fair to say that the market is just beginning to truly operate in Vancouver, almost fifteen years after the policy was first put in place.

It seems likely that the prices were often lower than expected due to the lack of differentiation in the Vancouver transferable density market. All density is not the same; the city may have been perfectly correct in originally assessing the value of floor space in the old B.C. Hydro building, in the heart of the downtown.¹⁰⁶ However, when this density is in the same market as the much cheaper density deriving from the Stanley Theatre outside of downtown, it is not surprising that the density from the old B.C. Hydro building will sell for less than

¹⁰⁵ Bancroft-Jones. interviewed August 7, 1998.

¹⁰⁶ City of Vancouver Policy Report. *Development and Building*. June 11, 1993. p. 7-10.

the city's estimate.

The issue of differentiation is further obscured by the fact that the vendors of transferable density claim to differentiate the price based on the destination of the density. That is, they attempt to charge a constant percentage of the value of the density where it is deposited. Given the transferable density's lack of differentiation, it is difficult to see from where this ability derives. Picture a gas station which attempts to charge the owners of expensive cars more for gas than the owners of cheaper ones. If the gas is the same, the attendant will have a difficult time convincing a Mercedes driver to pay more than a Honda driver. Nonetheless, knowledgeable Vancouver sources maintain that the vendors of transferable density are able to charge different prices depending upon the destination of the density.^{107,108}

The construction of the Wall Centre took a good deal of transferable density out of the market.¹⁰⁹ Consequently it might be assumed that the price for transferable density will rise. However, Anne Bancroft-Jones, the deputy manager of Vancouver's Real Estate Services, asserts that prices will remain low as long as there are several vendors of density vying to sell their rights.¹¹⁰ According to Ms. Bancroft Jones, a limited number of rights is less significant than the number of vendors in the market.

Another reason that transferable density will always be cheaper than other density is intrinsic to the nature of real estate. The higher density a property contains, the less valuable each square foot of the density is. That is, a square foot in a single residency, detached house would be more expensive than a square foot in a high rise in the same location. When an entire property is purchased,

¹⁰⁷ Partington. interviewed by Ari Goelman January, 1999.

¹⁰⁸ Bancroft-Jones. interviewed by Ari Goelman August 4, 1998.

¹⁰⁹ see case study below.

¹¹⁰ Bancroft-Jones. interviewed by Ari Goelman August 4, 1998.

the value of all square feet is contained in the total price. If the feet were to be purchased incrementally, the last square foot would presumably be worth less than the first one. Transferable density floor space is always the last floor space to be added; hence, it will tend to be cheaper than other floorspace.

The low price for transferable density results in requiring larger quantities of density to compensate the property owners for restrictions on their property. If the discount for transferable density was somehow lessened, significantly more heritage properties could be protected without increasing the overall density allowed to the owners. The value of transferable density could potentially be heightened by the introduction of a true TDR bank to Vancouver or some other mechanism to provide a last resort buyer for transferable density. Through this mechanism the city could directly insure that a higher price was offered for transferable density, heightening the bargaining power of the vendor of rights. However, this price would have to be sufficiently low to not dissuade the potential purchasers of transferable density. The price could also be increased by further lowering the transaction costs of entering the market. Vancouver's situation in this respect deserves further description.

Maturity of the Program

The use of TDRs in Vancouver is currently so inefficient that it is only practical for huge developments on the downtown peninsula. Even with the recent changes making the program less hindbersome, the process still necessitates lawyers, negotiators and urban design commentaries. However, there is a consensus among Vancouver planners and developers that Vancouver's TDR program is becoming more mature.¹¹¹ As TDRs become more accepted, the process surrounding their use is becoming more normalized and less discretionary.

¹¹¹ McGeough. interviewed August 20, 1998.

It is certain that Vancouver's density market is becoming more fluid. As explained above, recent changes have made rezonings unnecessary for both the sending and receiving sites involved in transferring density. The policy is also being better communicated to the public. A table of available transferable density is now included in the monthly planning updates prepared by the city.

Additionally, planning staff are working with the Real Estate Foundation of British Columbia to inform members of the available density and to make the information available on an internet site. As it becomes better understood, presumably the process will become further streamlined, and as the process becomes more streamlined, one might expect the use of TDRs to be allowed outside of the high density areas to which it is currently restricted.

There are already signs of TDR use becoming less discretionary. According to the new zoning schedule for the HA-1 and HA-1A districts (Chinatown Historic Area), if the owner of a site within these districts agrees to restore a heritage building and protect it, they can be compensated with a bonus of 2 FSR to sell for transfer elsewhere.¹¹² Receiving the bonus will still require council approval, but such an approval would be almost certain. This new zoning schedule was passed as of April, 1998, and it has yet to be used. Nonetheless, the simplicity with which it supplies TDRs would seem to augur a future where TDR use in Vancouver is increasingly formulaic.

IV. Case Studies

General Comments

The purpose of these case studies is not to reiterate the heritage motives which led to the density transfer. These cases have been analyzed from a heritage standpoint elsewhere; given the nature of this analysis I am more

¹¹² City of Vancouver Zoning and Development By-law. *HA-1 and HA-1A Districts Schedule (Chinatown Historic Area)*. p. 8 (point 4.7).

concerned with the actual workings of the transfer of density, as well as the non-heritage contributing factors leading to the preservation effort.

Since the transfer of density has only been used to preserve six buildings in Vancouver, it is difficult to distinguish significant trends from happenstance. However, several general statements can tentatively be made with regard to its use.

All of the cases include a heritage bonus to the site to be preserved. This bonus is then transferred, in part or in full. As explained above, Vancouver's practice of simply transferring square meter for square meter is deceptive. In each case a sophisticated financial analysis was performed to calculate an appropriate heritage bonus. It was then this heritage bonus, in addition to any residual density pertaining to the property, which was transferred. It should also be noted that each of the preserved buildings had reasons in addition to heritage for their preservation.

In most of the cases, the price the city assumed the landowner would receive for the density is believed to have been somewhat different than the actual price received, usually higher. However, in the case of the Stanley theater, the city was exactly right, perhaps due to taking some part in the negotiations, or perhaps due to the purchaser's deliberate decision to aid the non-profit group vending the density. This section includes seven case studies. Six of the case studies focus on the six heritage buildings in Vancouver which have been allowed to transfer density. A discussion of the Wall Centre is included as the seventh case study; the sheer amount of transferable density incorporated in the Wall Centre's construction make it worthy of examination.

The "Electra" / The Old B.C. Hydro Building - 970 Burrard

In 1993, the Old B.C. Hydro building was bonused 150,000 square feet in return for accepting a heritage designation. About two thirds of that bonus was

used on site, with the remaining 58,927 square feet allowed to be transferred. It was the first time in Vancouver that density transfer was used for heritage purposes. It was also unique in several other ways:

- The adjacent property on which the bulk of the heritage bonus was deposited had been part of a transfer of density five years before. In that transfer, the density allowance had remained unchanged, but the requirements to provide residential and commercial space had been shifted. This lot had traded its residential requirements for another lot's commercial requirements. The details are less important than the outcome.¹¹³ The lot next to the B.C. Hydro building was released from its obligations by this new density transfer in 1993. Clearly, density transfers can only work as a mechanism if they are binding; this case would seem to challenge that.
- Another outcome of this prior transfer was an implicit increase in the bonus. The property was zoned a comprehensive development (CD-1), and thus its zoning took advantage of a hotel bonus which had been eliminated from the downtown in intervening years. The developer successfully argued that eliminating this hotel bonus would require a larger heritage bonus. By his calculation, if the hotel bonus was factored in, the bonus of 150,000 square feet was really worth 180,000 square feet. This is almost twice the heritage bonus received by any other property involved in the heritage transfer program.
- The B.C. Hydro building was converted into the Electra, a residential building. This fulfilled city goals of affordable housing, as the converted rooms were smaller and had less amenities than the norm for the downtown area.

The Old Vancouver Public Library - 750 Burrard

The old public library was involved in the second major attempt to utilize the transfer of heritage density in Vancouver. This is the only case where transferable density was used by a property intimately connected to the city.

- The owners of the building were allowed to transfer more than four times the amount of floor space than any other case in Vancouver.
- The building was a public building. It was sold with the understanding that the heritage bonus of 195,000 square feet would be made available to the developer if the building was preserved. The immense size of this bonus allowed the city to sell the building for a sum sufficient to aid the purchase the site for the new public library, while preserving the older building.
- Along with the Stanley Theatre, the library was one of the two cases where

¹¹³ City of Vancouver, Planning. *Transfer of Density Rezoning - 900 Burrard Str.* June 24, 1988. p. 1-6.

all of the bonus and residual density was allowed to be transferred. This stemmed in part from a height restriction on the site, due to its relationship to the Queen Elizabeth Park view corridor.

- Although I noted above my reluctance to delve into the actual heritage issues, it should be noted that the new use of the building is held by some to detract from its heritage value. The new tenants, Virgin Records and Planet Hollywood, have obscured the building's classic modernist design with garish signs and advertisements.

Abbott House -720 Jervis

Most of the density accruing to the owners of the Abbott House was used on-site in two 35-story buildings built alongside the historic Abbott House. No transfers have yet taken place, nor are there any applications underway at the current time. The Abbott House itself has been converted to strata-title apartments.

The Canadian Linen Building - 1228 Richards

Although the Canadian Linen building is not one of the most highly rated heritage buildings in Vancouver, it was determined to be worthy of a restoration program, largely due to its landmark presence on Richard and Davie. Davie is meant to be a major retail street connecting Granville Street to Yaletown and the Concord Pacific Development. The owners of the Canadian Linen development intend to adaptively re-use the building as a retail market. Two additional issues should be noted, both dealing with the owner's discontent.:

- The city assumed that the density rights would sell at 35\$/square foot, but according to the developer they have sold at prices ranging from 22-25\$. The planners involved contend the discrepancy is explained by the hazard of the market. The city's assumptions were based on a reasonable value for transferable density. To a large extent the issue would seem to depend upon the future of density prices in Vancouver. The vast majority of density transactions that have taken place in Vancouver have taken place in the preceding year. Hence, it is difficult to predict long range trends based on the scarce data available.
- The developers maintain that the amount of floor space used on-site was calculated under an incorrect assumption regarding an upcoming change in zoning. The building was bonused up to an FSR of 6.4. According to the original calculations the on-site building, the "Metropolis," uses 5.12 FSR, leaving 1.28 to be transferred. The developer argues that under present zoning, the FSR should have been calculated as 4.81 FSR. Hence, they believe they should have 1.59 to transfer. This extra .31 FSR to transfer amounts to an additional 8,830 square feet.
- To a large extent this second complaint was successful -- with Council

approval, the planning department increased the amount of transferable density by approximately 7,000 square feet.

The Stanley Theatre - 2750 Granville Street

The Stanley Theatre is an unusual case on several grounds:

- The proceeding anomalies all stem from the complexities of the goals in this case. The city was attempting to not only preserve the Stanley Theatre, but to preserve it in use as a theatre. To do so, it was thought necessary to facilitate the purchase of the theatre by a non-profit organization, formed specifically for this purpose.
- The density was bonused, not to the owner, but to the non-profit society. With the owner's permission, this non-profit agency, the Stanley Theatre Society, was allowed to sell off both the bonus and the residual density.
- The amount of the bonus was not based on the typical residual analysis, but rather on the need of the society to purchase the theatre. The residual analysis would have indicated a much lower bonus was necessary; floor space on south Granville Street has significantly less value than that in the downtown peninsula. The owner of the Stanley Theatre could have been compensated with significantly less rights had the retention of the building been the only concern. The additional bonus was necessary to not only retain the theatre, but to retain it in use as a theatre, rather than its "highest and best" use as a commercial site.¹¹⁴
- In addition to the bonus and transfer, the city contributed \$100,000.00 in cash to this effort. (The project also received 2.6 million dollars from the Canada/B.C. Works Program.)¹¹⁵
- The city determined that if the rights were not sold in a timely manner, they would revert to the owner of the Stanley Theatre. This was seen as a very undesirable outcome, as the extra bonus intended for a non-profit organization, would be used for profit, without attaining the social goals of the transfer. Nonetheless, it was seen as the least bad alternative. This fear was assuaged when the Wall Centre purchased all the rights the Stanley Theatre had available. (44,000 square feet.)
- This transfer marked the first time that density had been allowed to be transferred into the downtown peninsula from outside.

The Edgett Building / The Architecture Centre - 440 Cambie

The historic Edgett Building was purchased in a joint venture with other parties in association with the Architectural Institute of B.C. (AIBC) for the purpose of establishing a new office for the AIBC, as well as strata-titled offices.

¹¹⁴ Bancroft-Jones. interviewed August 7, 1998.

¹¹⁵ The rights sold for 1.2 million dollars. With the city's contribution of 100,000 this led to making their contribution exactly the one third they had promised.

The notable features are as follows:

- The building is not a top ranked heritage site; presumably the city's goals in allowing this density transfer go beyond heritage preservation.
- The building adjoins the ailing Victory Square. Renovating the building is hoped to contribute to the municipal goal of revitalizing the square.
- By allowing a heritage bonus and a density transfer the city is also supporting the Architectural Institute. It might be argued that the level of city support is inappropriate, given the non-public nature of the AIBC and the 35,000 square feet which were made available for the site's transfer.

The Wall Centre (1000 Burrard)

This final case study does not deal with a heritage building. The Wall Centre is in fact an extremely recent addition to downtown Vancouver. The final phase, currently under construction, will include the tallest tower in downtown Vancouver. This tower will incorporate almost three quarters of all density thus far transferred in Vancouver. The tower will have an FSR of 10.47, in an area where the standard FSR is 6.0. The centre's relatively massive use of transferable density merits its inclusion in this chapter.

- In addition to its high FSR, the tower will have a height of 450 feet, violating the city norm of 300 feet, and the Queen Elizabeth Park view corridor. These violations are within the development board's purview to allow, and they are technically removed from the issue of transferable density. Nonetheless, the planners' decision to recommend approval of the development, in spite of these infractions, was explicitly linked to the use of heritage density, and the subsequent benefits to the city.¹¹⁶
- The density transfers were unusual in that they were done in two distinct installments. In the first transaction, the Wall Center purchased about 50,000 square feet, the majority of which came from the Stanley Theatre. With this additional density they proposed to build the highest tower in Vancouver. This passed without necessitating council's approval, or the attendant public hearing, as it was within the ten percent density increase allowed without a rezoning. The following year, the Wall Centre purchased an additional 180,000 square feet of transferable density. These were to be absorbed without further increasing the height or the size of the building. Rather the center would create additional facilities below grade, and add floors with lower ceiling heights. Hence, although the additional density required council approval, and the attendant public hearing, the developers could accurately argue that this additional density conferred great public benefit upon the city, with remarkably few impacts. The most controversial feature of the building, its unusual height, was not subject to public hearing. One wonders what the result might have been if the order of these two transfers had been reversed.

¹¹⁶ City of Vancouver Policy Report. July 9, 1998. p. 2.

- The Wall Centre paid the Stanley Theatre exactly what the city had allotted them for their rights -- 1.2 million. Given the flurry of concern regarding the society's potential inability to sell their rights it seems unlikely that this was prearranged. Rather, it would seem that the owners of the Wall Centre paid the 1.2 million after discovering the Stanley Theatre Society required that much to purchase and restore the theatre. This was slightly above the market rate at the time.¹¹⁷ Several reasons might be suggested for this action, but their true rationale in paying the higher price can only be surmised. Perhaps they were genuine supporters of the restoration of the Stanley Theatre. Alternately, perhaps they paid a few more dollars than they absolutely had to for the development rights, in a bid to insure the municipality's support for their proposal to build the tallest tower in Vancouver. It seems likely that both of these motives contributed to their decision.
- The Wall Centre would seem to exemplify the discussion in chapter three (p. 18) regarding monopsony power in a TDR market.¹¹⁸ In sum, the Wall Centre purchased 233,789 square feet of density. Only 325,000 square feet have been thus far transferred in Vancouver, and only 242,432 square feet remains on the market. The Wall purchase comprised 71% of all heritage density thus far transferred in Vancouver. Hence, the purchasers would certainly seem to have had market power. Ordinarily, one would expect the existence of a monopsony or monopoly to lead to a less efficient outcome in a market. However, as Robert Hahn¹¹⁹ argues, this is not necessarily true in a TDR market. If the limit on the pollutant, in this case density, is sufficiently low, and if the player with monopsony power has sufficiently high demand for the density, then there need be no ill effects on the market. This appears to have been the case with the Wall Centre as they in fact paid a price above the market rate. Once again, though, the small size and youth of the market make it difficult to draw any certain conclusions.

VII. Attainment of Objectives / Tradeoffs and Choices made in Vancouver

Attainment of the General Policy Objectives (tradeoffs)

Given the complex tradeoffs between the general policy objectives of scale, fairness and efficiency, it is difficult to hierarchically place their precedence in

¹¹⁷ Insofar as a market existed it was above the market rate. The Wall Centre paid about \$27 / square foot of density; in the same time period, the Canadian Linen Building received \$22-\$25 / square foot.

¹¹⁸ Monopsony power refers to a situation where the demand of one firm for a good represents such a large portion of the market, that that firm possesses a degree of market control -- through its actions it is able to influence the price extant in the market.

¹¹⁹ Hahn. 1984. p. 753-765.

Vancouver's transfer of density policy. However, it can be generally stated that fairness or distribution concerns are given precedence. Within the boundaries established by these distributional concerns, the policy addresses the scale concerns implicit in preserving heritage sites. The objective of efficiency is currently almost disregarded in the pursuit of the other two policy objectives.

In terms of distributional effects, the defining characteristic of Vancouver's program is its voluntary nature. No property owner is forced to participate in its heritage preservation program. Rather, sufficient density must be bonused to convince them to enter the program. Thus, the rights of property to owners to the highest and best use of their property are approached as almost inviolable. Large density bonuses are countenanced to the owners of heritage sites, rather than simply mandate their restriction with some accompanying compensation.

The greater Vancouver area offers an interesting contrast between methods of regulating land use. Due to the voluntary nature of the program, Vancouver's heritage program is careful not to trespass on the rights of effected property owners. In almost adjacent jurisdictions, which contain land in British Columbia's Agricultural Land Preserve, development is simply restricted. No compensation occurs; the provincial legislature has simply mandated that agricultural land must be preserved. In other jurisdictions in North America, TDRs have been a relatively effective part of programs to conserve farmland in that they provide means of compensating the land owners. In British Columbia, this compensation is simply deemed unnecessary. Of course, the value of the land in the agricultural preserve is far less than that affected by Vancouver's heritage preservation program.

The precedence Vancouver's transfer of density program gives to distributional concerns is also visible in the absence of any accompanying

downzoning. Rather than downzone to minimize the urban design difficulties attendant with a transfer of density program, Vancouver has chosen to simply keep the program very limited, with a large discretionary component insuring no urban design disasters. Although scale issues are controlled at the expense of a more efficient program, this tradeoff is only made necessary by the precedence given to distributional concerns. Downzoning would lessen the value of all property in densest areas in Vancouver, and the program chooses to avoid this, at the expense of the other major policy objectives.

The program's attention to its distributional effects is based on very particular presumptions regarding the nature of a "fair" program. By enshrining the rights of property owners, the program implies that any infringement upon the rights of these owners to put their land to its highest and best use is unfair. Presumably, this interpretation of distributional fairness is also influenced by concerns for insuring the political feasibility of the program.

Some property rights advocates might argue that all property rights are not afforded absolute protection. Simply requiring the developer to pay for additional density is construed by some as an infringement on their property rights, as the zoning should already allow for free density which does not harm the urban fabric. This argument, however, would seem to ignore the fluid nature of urban design. Most planners would agree that zoning sets out crude limits, a few supervised exceptions of which would not cause damage. The requirement to purchase TDRs simply eliminates some portion of the windfall that would otherwise accrue to the recipients of a free upzoning. The use of TDRs is premised on the assumption that eliminating some portion of this windfall is fair.

Some would argue that developers in British Columbia already must pay

too much for their developments, in the form of Development Cost Charges (DCCs). These charges have been the subject of a good deal of public debate, as developers claim they are being charged too much to profitably provide the developments that a healthily growing municipality requires. However, it is rarely mentioned that the DCCs allowed in British Columbia are far less than those allowed in other jurisdictions, particularly the United States.¹²⁰ In British Columbia, DCCs are limited to a share in the hard physical infrastructure that their new developments are likely to require, whereas in the United States municipalities may charge developers for any amenity whose use can be linked to a new development.

Given this relatively low level of taxation, requiring the purchase of additional density would seem an unobjectionable idea. Much of the value of urban property has been created by previous public investment, and upzoning a property will further increase the value. It would seem reasonable to mandate that some of this increased value is passed on.

The program's fairness might also be challenged with respect to its cumbersome discretionary nature. Currently, only extremely large developers can afford the legal costs associated with the use of transferable density in Vancouver. Given the significant fiduciary rewards to those who can afford the entrance cost, the discretionary nature of the program would seem unfair to small developers who are unable to utilize the transferable density.

As noted above, the current small size of the program and the large transaction costs to any participant speaks to a direct tradeoff where the objective of a good scale is pursued at the expense of a more efficient program. However, as also described above, the trend in Vancouver seems to be one of increased fluidity. Without an accompanying downzoning, this could increase efficiency at

¹²⁰ Buholzer. class notes.

the expense of good urban design. A downzoning would allow efficiency increases without creating negative impacts on urban design, but it would have distributional effects. A downzoning tends to increase the cost of development, as developers are forced to purchase the density which was previously free.

Within the hierarchy described above, Vancouver's transfer of density program currently strikes a balance between the primary objectives of a good policy. Lessening the discretionary nature of the program would be necessary to expand its use, but would seem to require a choice between insuring an appropriate urban design in downtown Vancouver, or further impinging upon the rights of property owners. While the choice need not be absolute, some tradeoff with the other two objectives might be necessary in order to make the program more efficient.

It should be remembered, though, that the concept of fairness goes beyond the rights of property owners to the highest and best use of their property. Lowering the transaction costs would not only improve the efficiency of the program, it would also make it more accessible to small developers, currently unable to afford participation in the program. Also, of course, fairness concerns can be invoked with regard to the obligation of an urban property owner to the public, who in a sense generates the property value. A broader interpretation of the nature of a "fair" policy could allow gains to the other major objectives without sacrificing fairness.

Attainment of the More Specific Objectives

Vancouver's transfer of density right program deals well with each of the more specific objectives discussed in Chapter 3. The voluntary nature of the program insures its political viability, and its discretionary nature makes it very flexible. The policy has clear and well defined goals. As the use of the program

becomes more common, it is becoming better understood by the public.

The construction of the Wall Centre will provide a good case study of the public support for Vancouver's transfer of density program. Since it will be the tallest building in Vancouver, the Wall Centre is generating a good deal of controversy. To date the level of public support or opposition remains uncertain. Only one member of the public spoke at the public hearing which approved the tower's massive use of transferable density.¹²¹ This speaker challenged the amount of density the tower received, but did not seem to challenge the program itself. However, it would seem premature to gauge the public mood based on the limited information available.

VIII. Conclusion

In this chapter I have integrated the previous analysis in the context of Vancouver's transfer of density program. After describing Vancouver's program in detail, I explored the hierarchy in which Vancouver places its general policy objectives, and found that distributional concerns were given primary importance. Due to the primacy of the protection of property rights, and the necessity to maintain urban design controls, the program has been limited to a relatively small amount of transactions. Nonetheless, the program has recently shown many signs of increasing fluidity, and seems to be gaining importance in Vancouver.

I begin the next and final chapter with an extremely brief overview of the research accomplished in the thesis. I proceed to further discuss the most important conclusions I reached, both with respect to Vancouver and with respect to TDRs in general. I end the thesis on a more speculative note. I believe that the research detailed in this thesis raises many questions; in the final section I briefly discuss possible avenues for future research.

¹²¹ Vancouver Public Hearing. September 15, 1998. p. 3.

Chapter 6 -- Conclusion (Outline)

- I. Overview
- II. General Conclusions
- III. Conclusions with respect to Vancouver
- IV. Avenues for future research
- V. Conclusion

Chapter 6 -- Conclusion

I. Overview

In this thesis I essentially constructed a conceptual framework with which to discuss TDR programs, and then applied it to Vancouver's transfer of density program. I began with a general description and history of TDRs. Then, after proposing applicable policy objectives, I assessed the different decisions possible in the design of a TDR program. I ended this section with an evaluation of the relationship between these policy levers and objectives. Finally, I synthesized all of these discussions in an examination of Vancouver's transfer of density program.

In this final chapter I will begin by highlighting and contextualizing some of the conclusions I reached; these include both general conclusions with respect to TDR, as well as conclusions more specific to Vancouver's program. I will proceed to suggest certain avenues for growth that these conclusions would seem to encourage Vancouver's program to explore. Finally, I will conclude the thesis with several potentially profitable avenues for future research.

II. General Conclusions with respect to TDR Programs

TDR programs are effective tools for redistributing the costs and benefits of certain types of land use restrictions. Within this basic purpose, TDR programs can vary widely in their effects. Depending on the specific design of a given program, it can have very different implications, particularly with respect to its distributional effects. For instance, the impact of a TDR program on property rights can vary widely depending upon the program's design. If it is a mandatory program, a certain amount of private property rights may well be sacrificed to the public good; if it is a program in which land owners must choose to participate, private property rights will be largely respected by the program.

Notwithstanding their urban roots, TDR programs tend to see more use in a non-urban setting. Although initially most TDR programs were instituted in urban settings, the TDR programs which have seen the most use have almost invariably been in non-urban settings, used to preserve environmentally sensitive or agricultural land. The success of these non-urban programs would seem to stem primarily from two factors: i) non-urban land is cheaper, and hence it is more politically feasible to restrict the right to develop; ii) generally there is less density involved per transaction in these non-urban programs, and hence these programs require less discretionary review.

Although TDR programs involve the use of a market mechanism, particularly in urban programs, high transactions costs tend to hinder the efficiency of TDR programs. Due to these high transaction costs, the programs tend to have more relevance to the goals of distributive fairness and good urban scale than increased efficiency.

III. Conclusions with respect to Vancouver's Transfer of Density Program

Like any program, Vancouver's program is currently striking a balance between various policy objectives. As noted in chapter five, it can be generally stated that fairness or distributional concerns are prevalent in Vancouver's program. Specifically, the protection of property rights is one of the defining elements of the program. Not all would agree with this assessment; as discussed in the last chapter, one of the criticisms levied against the program is the necessity for developers to purchase additional density that might otherwise have been granted them for free. However, losing a currently non-existent property right would seem qualitatively different than losing a currently existing property right. In any case, given the voluntary nature of Vancouver's transfer of density program, the property rights of the owners of heritage sites are left

completely intact.

The fairness of Vancouver's program, thus, largely depends upon one's assumptions with respect to property rights. The anarchist philosopher Pierre-Joseph Proudhon, from whom much early planning theory derived, has been paraphrased as stating that individual property ownership is "the essential guarantee of a free society, so long as no one owned too much."¹²² Whether Vancouver's program is too solicitous of private property rights is ultimately a political decision to be determined by elected officials; it is simply hoped that chapter five of this thesis made the effects of the current structure more explicit in this regard.

A less subjective issue is the desirability of lessening the transactions costs involved in Vancouver's program. There are several reasons for wishing to lessen transactions costs. One can assume an inverse relationship between the price of density rights and the transactions costs accrued by their use. The easier it is to use the rights, the less their price will be discounted from other density. A higher price would make transferable density a more valuable tool for the city, as it could "purchase" more public amenity for the same "price" in additional density.

Lowering the transaction costs would also make the program more fair. Currently, the use of transferable densities require such large projects that their use is only practical to very large developers. In economic terms, the costs of entry into the market are sufficiently high to act as a significant barrier to smaller developers seeking to enter the market. Presumably, this prevents smaller developers from reaping the rewards the use of extra density might make possible. Also, the entrance of more potential purchasers into the market might further bid up the prices of rights.

¹²² Hall. p. 143.

In recent years transaction costs in Vancouver have gone down significantly, particularly with the 1996 amendment permitting transfers to take place without rezoning the receiving site. It is difficult to isolate the effects of this policy change from the effects of other variables which effect the land market. However, the take-up rate of transferable density in Vancouver has certainly increased in the subsequent three years; some degree of this increase is almost undoubtedly due to the decrease in transaction costs.

Effecting a further decrease in transaction costs clearly merits exploration. The establishment of a TDR bank in Vancouver could be invaluable in facilitating a smoother market. A TDR bank could act as the buyer of last resort as well as a broker of rights, insuring a higher price to the owners of development rights. The existence of such a bank would also remove much of the uncertainty from the market, which would further bolster prices. Depending upon the bank's structure, it might also make the transferable density market more accessible to small developers who currently cannot afford to use the rights.

However, the existence of tradeoffs must be remembered. If there were easy improvements possible to the program, they would probably already be made. Establishing and maintaining a TDR bank would require a significant infusion of capital. Further, any expansion of the program might make the current high level of discretionary review difficult to maintain.

IV. Avenues for future research

One of the most interesting avenues for future research would be a detailed price study of the transferable density market in Vancouver. As described in the last chapter, the market for transferable density in Vancouver has slowly become a more competitive market. Nonetheless, given the accounts

of various developers and planners, prices would still seem to be set in an unusual fashion; although the transferable density itself is an undifferentiated good, the price is said to differ based upon the destination site where it is to be used. In recent years, the market has increased sufficiently to make a price study a viable and productive enterprise. The knowledge such a study would provide would also aid another potential fruitful avenue of future research - the possibility of establishing a TDR bank.

A study with respect to the viability of a TDR bank in Vancouver would be useful in terms of further expansion or modification of the program. If Vancouver's program is to be expanded, a TDR bank could be crucial. However, the success of a TDR bank, like that of a TDR program, largely depends on the nuances of its calibration. Constructing a useful TDR bank would be predicated on first completing a comprehensive study before its implementation.

Another subject worthy of exploration is the potential of expanding the program, or creating a new program, in other areas of Greater Vancouver. In other North American jurisdictions, TDRs have been found ideal for redirecting development away from sensitive ecological areas. As such, TDRs might be helpful in resolving several ongoing issues in the lower mainland. For instance, recently a good deal of public discourse has centered around the town of Delta's "Burn's Bog." Burn's Bog is an environmentally sensitive wetland which is in the process of being developed.¹²³ Since the area is privately owned, much of the discourse has centered around means of compensating the land owners for restricting development. A TDR scheme might offer an excellent way of reconciling the public and private interests present in such situations. Also, the additional development TDR schemes create could be funneled to the regional growth centres identified in the Greater Vancouver Regional District's growth

¹²³ Christie. p. 15.

plan.

Much broader avenues for future research could also be identified. One interesting project could involve a comparison of Canadian and United States planning responses to controlling development. Such a study could profitably use TDR programs as a lense through which to view the differences in the ways United States and Canadian municipalities regulate growth.

V. Conclusion

Like any tool, TDR programs are neither intrinsically good or bad. Early proponents of TDR may have exaggerated their utility, but they remain a useful instrument with which to redistribute the costs and benefits of certain types of land use restrictions. They are not useful in every circumstance, and even in those circumstances where they are useful, they must be carefully calibrated and adjusted to the particulars of the situation.

In Vancouver, they have been used successfully as a rather marginal adjunct to the heritage preservation program. In recent years the program has seen significant recalibrations which have led to a marked increase in the use of transferable density in Vancouver. As the program is used more, it is likely to be further modified to suit Vancouver's needs.

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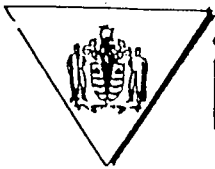
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Appendix 1 -- List of Interviews

1. Bancroft-Jones, Anne. Real Estate Services. City of Vancouver. interviewed by Ari Goelman. August 7, 1998.
2. Beasley, Larry. Central Area Planning. City of Vancouver. interviewed by Ari Goelman. August 4, 1998.
3. Geller, Michael. the Geller Group. interviewed by Ari Goelman. July 23, 1998.
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5. McGeough, Gerry. Heritage Planning. City of Vancouver. interviewed by Ari Goelman. August 20, 1998.
6. Partington, Terry. interviewed by Ari Goelman. January, 1999.
7. Rasheed, Margaret. interviewed by Ari Goelman on March 16, 1998.



Land Use and Development Policies and Guidelines

Transfer of Density Policy and Procedure

*Adopted by City Council January 25, 1983
Amended September 11, 1984, July 7, 1987,
July 30, 1991, September 2, 1993,
December 8, 1994 and April 2, 1996.*

Rezoning applications which involve the transfer of density from one site to another site will be considered, provided that such a transfer will assist in achieving one or more of the following public objectives:

- (1) To preserve heritage buildings or site, listed on the Vancouver Heritage Register, particularly where it is demonstrated that residual and/or bonus density required for the buildings' rehabilitation cannot be used on the heritage site;
- (2) To create desirable public open space or park land;
- (3) To facilitate development in areas with mixed use zoning;
- (4) To achieve and improve urban design;
- (5) To help implement Council-approved view protection policy in Downtown South;
- (6) To help protect existing Single Room Occupancy Stock in Downtown South;

provided further, that the following limitations are respected:

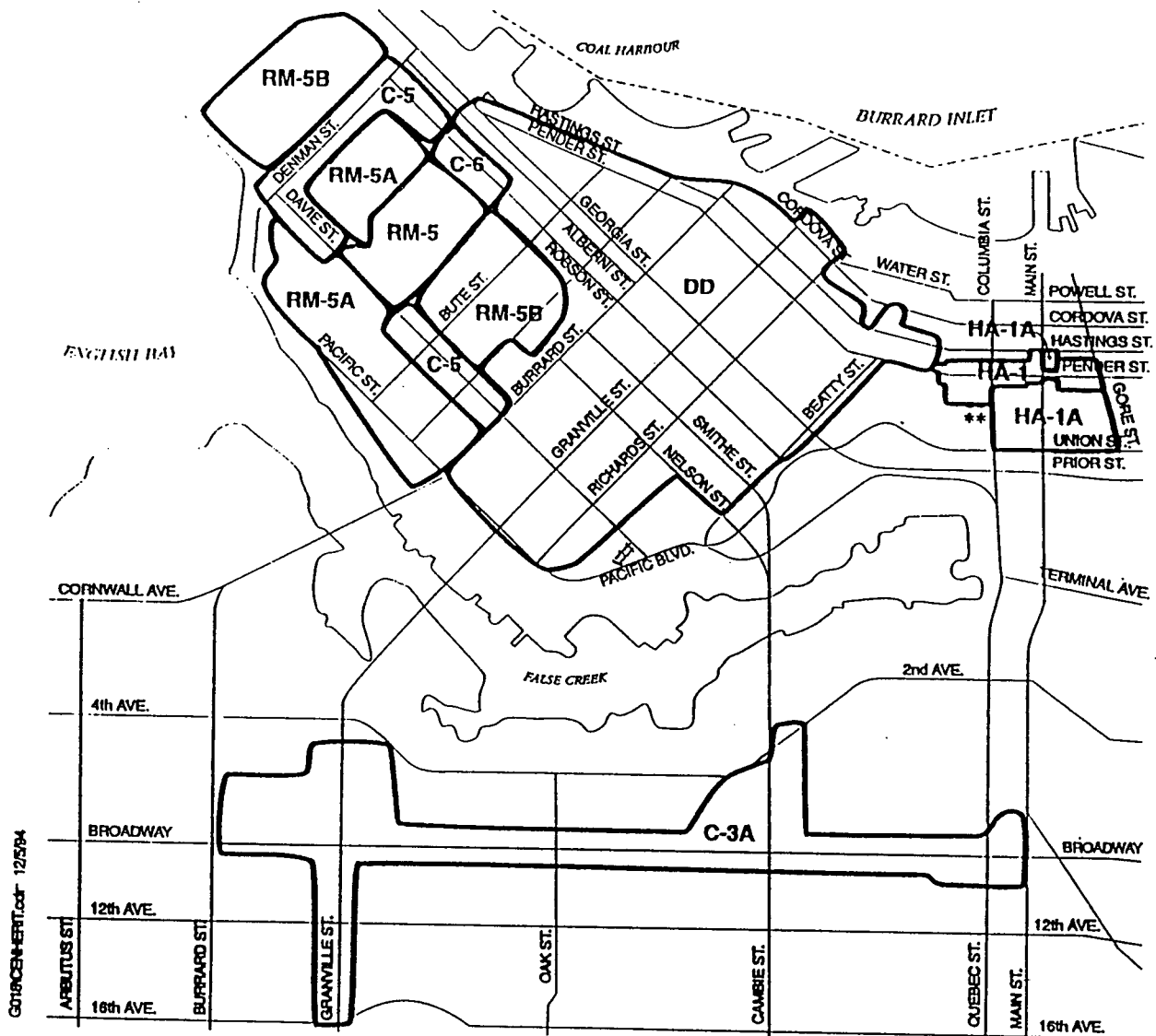
- (a) Except for heritage sites as defined in (b), the sites are not separated by a zoning boundary or use, density or height district boundary in an Official Development Plan, unless the sites involved are both within the same block; or the donor site is in the 800-1200 blocks of Granville Street and the recipient site is in Downtown South.

- (b) Transfer of density may be considered for approval by the Development Permit Board involving heritage sites located within and between the various zones of the Central Area including: Downtown District ODP, RM 5, RM-5A, RM-5B, C-5, C-6, HA-1, HA-1A and CD-1, and those portions of C-3A located west of Main Street, north of 16th Avenue, and east of Burrard Street, except that no heritage density may be transferred onto sites located in the HA-1 and HA-1A Districts.
- (c) If the objective to be served is (4) urban design, the sites are within the same block or separated only by a single street;
- (d) The aggregate development potential for the sites remains unchanged by the transfer;
- (e) The aggregate development potential for any specific use remains unchanged by the transfer;
- (f) No bonuses for public, social or recreational facilities are transferred;
- (g) Except for transfers involving heritage sites, no more than two sites are involved in any transfer and a site is not involved in more than one transfer;
- (h) The proposal has been demonstrated to further the intent of Council's policies and regulations for the area; and
- (i) Heritage bonuses may be transferred if Council has previously decided under its heritage bonus policy that all or part of the bonus density cannot be used on the heritage site without undue impact on the character and context of the preserved building, or without an unacceptable impact on surrounding properties.

The following procedure is to be followed in applying the density transfer policy:

- (1) For transfers to achieve heritage objectives:
 - (i) Heritage features to be preserved on the donor site shall be defined by the Director of Planning or the Development Permit Board on the advice of the Vancouver Heritage Commission;
 - (ii) Residual (and bonus) density may be held on a heritage donor site through the use of a development limitation covenant which shall be amended as density is disbursed and ultimately discharged when all density is transferred;
 - (iii) Preference will be given to proposals which use heritage buildings for cultural, social, recreational and educational uses, especially when that use is historically associated with the building;

- (iv) For any site located within the HIA-1 District, where a development application is submitted to establish density available for transfer to another site, Council approval for the creation of the transferable density will be required as a condition of development permit issuance, although rezoning of the donor site is not required;
- (v) Within the Central Area as defined in (b) above, the following steps (2) to (8) involve the rezoning of the heritage donor site only; the receiver site is approved by the Development Permit Board;
- (vi) Density on receiver sites shall be sensitive to the impact of additional density on shadowing, floor plate shape and size, height and view corridors; and
- (vii) The following shall be excluded as receiver sites within the Central Area [as defined in (b)]:
- sites already receiving a 15 percent hotel bonus;
 - sites already receiving a heritage density bonus;
 - sites containing a single room occupancy (SRO) hotel, unless arrangements are made to secure or replace units; and
 - sites zoned CD-1, unless a provision is included in the CD-1 by-law.
- (2) Developer reviews his proposals with the Director of Planning.
- (3) Developer makes formal application for rezoning with appropriate supporting material to indicate details of and rationale for the proposal and analysis of relevant impacts. The Director of Planning may require that the developer concurrently file a preliminary development permit application.
- (4) Director of Planning coordinates staff review of proposal in consultation with Engineering, Social Planning, Park Board staff as required, including whatever public review process he deems appropriate to the specific proposal, and may include consideration of a preliminary development permit application by the Development Permit Board and the Urban Design Panel.
- (5) Council considers the proposal and staff review at Public Hearing and gives decision.
- (6) Appropriate legal agreements are drawn up according to recommendations in staff review of proposal.
- (7) Council enacts by-law.
- (8) Development permit application process is followed as in CD-1 development sites.



Transfer of Density Areas* for Heritage Preservation

- * Incorporating CD-1 zoned sites within the area boundaries
- ** heritage density may be transferred away from but not into the HA-1 & HA-1A Districts

Appendix 3: Photographs of Case Studies

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All photographs taken by Ari Goelman.

Case Study # 1

The "Electra" / The Old B.C. Hydro Building - 970 Burrard

Bonused: 150,000 square feet

Transferable Density: 58,927

Sold: 20,750 square feet (for \$37.50/ft²)

- This was the first time that Vancouver's transfer of density policy was used to facilitate a transfer of density rights. (Previous transfers had occurred, but only with respect to commercial and residential space requirements.)
- The adjacent property on which the bulk of the heritage bonus was deposited had been part of a transfer of density five years before. In that transfer, the density allowance had remained unchanged, but the requirements to provide residential and commercial space had been shifted. This lot had traded its residential requirements for another lot's commercial requirements. The details are less important than the outcome. The lot next to the B.C. Hydro building was released from its obligations by this new density transfer in 1993. Clearly, density transfers can only work as a mechanism if they are binding; this case would seem to challenge that.
- Another outcome of this prior transfer was an implicit increase in the bonus. The property was zoned a comprehensive development (CD-1), and thus its zoning took advantage of a hotel bonus which had been eliminated from the downtown in intervening years. The developer successfully argued that eliminating this hotel bonus would require a larger heritage bonus. By his calculation, if the hotel bonus was factored in, the bonus of 150,000 square feet was really worth 180,000 square feet. This is almost twice the heritage bonus received by any other property involved in the heritage transfer program.
- The B.C. Hydro building was converted into the Electra, a residential building. This fulfilled city goals of affordable housing, as the converted rooms were smaller and had less amenities than the norm for the downtown area.



Case Study # 2

The Old Vancouver Public Library - 750 Burrard

Bonused: 195,000 square feet

Transferable Density: 195,000 square feet

Sold: approximately 189,000 square feet

- The owners of the building were allowed to transfer more than four times the amount of floor space than any other case in Vancouver.
- The building was a public building. It was sold with the understanding that the heritage bonus of 195,000 square feet would be made available to the developer if the building was preserved. The immense size of this bonus allowed the city to sell the building for a sum sufficient to aid the purchase the site for the new public library, while preserving the older building.
- Along with the Stanley Theatre, the library was one of the two cases where all of the bonus and residual density was allowed to be transferred. This stemmed in part from a height restriction on the site, due to its relationship to the Queen Elizabeth Park view corridor.
- Some argue that the new use of the building detracts from its heritage value. The new tenants, Virgin Records and Planet Hollywood, have obscured the building's classic modernist design with garish signs and advertisements.



Case Study # 3

Abbott House -720 Jervis

Bonused: 33,877 square feet

Transferable Density: 15,793 square feet

Sold: none

Most of the density accruing to the owners of the Abbott House was used on-site in two 35-story building built alongside the historic Abbott House. (One of these towers is pictured next to the Abbott House below.) No transfers have yet taken place, nor are there any applications underway at this time.



Case Study # 4

The Canadian Linen Building - 1228 Richards

Bonused: 39,877 square feet

Transferable Density: 36,457 (and later an additional) 6,275.36 square feet

Sold: 43,337 square feet (for \$22-25/ft²)

- The Canadian Linen building was determined to be worthy of a restoration program, largely due to its landmark presence on Richard and Davie. Davie is meant to be a major retail street connecting Granville Street to Yaletown and the Concord Pacific Development.
- The owners of the Canadian Linen development intend to adaptively re-use the building as a retail market.
- See additional notes in the body of the thesis.



Case Study # 5

The Stanley Theatre – 2750 Granville Street

Bonused: 14,861 square feet

Transferable Density: 44,000 square feet

Sold: 44,000 square feet (for \$27.27/ ft²)

- The proceeding anomalies all stem from the complexities of the goals in this case.
- The city was attempting to not only preserve the Stanley Theatre, but to preserve it in use as a theatre. To do so, it was thought necessary to facilitate the purchase of the theatre by a non-profit organization, formed specifically for this purpose.
- The density was bonused, not to the owner, but to the non-profit society. With the owner's permission, this non-profit agency, the Stanley Theatre Society, was allowed to sell off both the bonus and the residual density.
- The amount of the bonus was not based on the typical residual analysis, but rather on the need of the society to purchase the theatre. The residual analysis would have indicated a much lower bonus was necessary; floor space on south Granville Street has significantly less value than that in the downtown peninsula. In addition to the bonus and transfer, the city contributed \$100,000.00 in cash to this effort. (The project also received 2.6 million dollars from the Canada/B.C. Works Program.)
- This transfer marked the first time that density had been allowed to be transferred into the downtown peninsula from outside.
- This project is discussed further in the body of this thesis.
- The building has undergone considerable restoration since the photograph below was taken.



Case Study # 6

The Edgett Building / The Architecture Centre - 440 Cambie

Bonused: 14,861 square feet
Transferable Density: 35,000 square feet
Sold: 35,000 square feet

The historic Edgett Building was purchased in a joint venture with other parties in association with the Architectural Institute of B.C. (AIBC) for the purpose of establishing a new office for the AIBC, as well as strata-titled offices. The notable features are as follows:

- The building is not a top ranked heritage site; presumably the city's goals in allowing this density transfer go beyond heritage preservation.
- The building adjoins the ailing Victory Square. Renovating the building is hoped to contribute to the municipal goal of revitalizing the square.
- By allowing a heritage bonus and a density transfer the city is supporting the Architectural Institute.

