THE TRANSFER OF DEVELOPMENT RIGHTS: SOME EQUITY CONSIDERATIONS*

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I. INTRODUCTION

One of the most critical public policy issues in the United States is the conflict between the rights of private property ownership and the public interest. Often termed the "taking issue," it is at the core of most land use controversies. The debate typically centers around whether and to what extent the public sector is required by law to compensate real property owners for public actions that have the effect of precluding maximum economic return from sale of their property.[1] Conventional measures such as zoning and other regulatory approaches have failed to resolve the recurring compensation dilemma.[2] It is not surprising therefore, that a technique has emerged which purports to combine aspects both of regulation and public compensation. Termed the "transfer of development rights" (TDR), this device has engendered considerable discussion and speculation as to its potential effectiveness in resolving the taking issue. Unfortunately, too little attention has been directed to its potential negative effects, in particular the inequities that are likely to result from a poorly designed TDR system. The purpose of this Article is to analyze examples of the two major types of TDR measures advanced to date, to identify poten-

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1. J. BANTA, F. BOSSELMAN AND D. CALLIES, THE TAKING ISSUE 1-2 (1973).

2. *Id.* at 212-35.

tial areas of inequity and to discuss an alternative approach which might mitigate, if not resolve, these liabilities.

Transfer of development rights[3] is a concept which is being used by several municipalities[4] to expand their control over privately-owned land without invoking eminent domain powers.[5] The basis of the concept is the severance of development rights from a privately-owned parcel of land combined with a guarantee to the owner that the rights can vest at some future date on a similarly situated piece of property.[6] TDR rejects the traditional premise that property ownership means dominion over a particular piece of land.[7] Instead, the concept is based on the idea that property ownership is merely the ownership of a "bundle of rights" which is not necessarily tied to a single parcel of property.[8] As a result of this rights transfer, the municipality may place restrictions on the use of the owner's land which would ordinarily qualify as "takings" under the fifth amendment.[9]

Courts have uniformly agreed on the constitutional validity of the basic concept.[10] When the municipality makes a transfer of rights mandatory however, it is critical that the severance of the development

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3. The literature now abounds with articles and studies which explore this technique at great length and in so doing, provide a much more comprehensive explanation than is possible in the present article.

A very helpful discussion of TDR's basic mechanics and legal history appears in F. Schnidman, *Transferable Development Rights: An Idea in Search of Implementation*, 11 LAND AND WATER L. REV. 339 (1976). *See also*, M. BAILEY, P. FOSTER AND F. SCHNIDMAN, TRANSFERABLE DEVELOPMENT RIGHTS: ARE THEY A STEP IN THE DIRECTION OF BETTER LAND USE MANAGEMENT? 1-8 (1974); *TDR: What's Happening Now*, 7 PRACTICING PLANNER 10-14 (1977); F. James and D. Gale, Problems and Promises of Transferable Development Rights for Land Use Planning (Urban Institute Working Paper No. 0800-02-1 1-73, 1976).

4. *See* Fred F. French Investing Co. v. City of New York, 39 N.Y.2d 587, 350 N.E.2d 381, 385 N.Y.S.2d 5 (1976).

5. *See generally* Carmichael, *Transferable Development Rights as a Basis for Land Use Control*, 2 FLA. ST. U.L. REV. 35 (1974); Costonis, *Development Rights Transfer: An Exploratory Essay*, 83 YALE L.J. 75 (1973).

6. Fred F. French Investing Co. v. City of New York, 39 N.Y.2d 587, 350 N.E.2d 381, 385 N.Y.S.2d 5 (1976).

7. Marcus, *Mandatory Development Rights Transfer and the Takings Clause: The Case of Manhattan's Tudor City Parks*, 24 BUFFALO L. REV. 77, 86-89 (1974).

8. *Id.*

9. 90 HARV. L. REV. 637, 638-39 (1977).

10. Fred F. French Investing Co. v. City of New York, 39 N.Y.2d 587, 350 N.E.2d 381, 385 N.Y.S.2d 5 (1976); Trinity Place Co. v. Finance Admin., 38 N.Y.2d 144, 341 N.E.2d 536, 379 N.Y.S.2d 16 (1975); Penn. Central Transp. Co. v. City of New York, 50 App. Div. 2d 265, 377 N.Y.S.2d 20 (1975).

rights does not destroy the value of those rights to the owner.[11]

For purposes of this analysis TDR measures can be grouped into two major categories: compensatory and redistributive. Compensatory TDR schemes would be used to achieve public land use planning objectives while attempting to ensure legally adequate compensation for affected property owners. Redistributive schemes, while not insensitive to planning and compensation issues, focus on promoting a reallocation of development rights among designated property owners according to criteria which, it is maintained, would more equitably distribute this form of wealth. These distinctions are elaborated in the following discussion.

II. COMPENSATORY MEASURES

Representative of most compensatory TDR schemes is the Georgetown Waterfront proposal.[12] Though not yet enacted into law, it was prepared through the sponsorship of citizens living in the historic Georgetown area of Washington, D.C. as a means of protecting part of that neighborhood's fine stock of eighteenth and nineteenth century buildings. The area along the Potomac River waterfront is under intense pressures for redevelopment to office, commercial and transportation uses. The Georgetown TDR scheme would allow transfer of development rights from waterfront area properties to transfer districts located in appropriate sections of the District of Columbia.[13] Owners of designated parcels in the transfer districts would be permitted to exceed the zoned density in new construction projects by a specified degree if they purchased the necessary number and type of rights.[14] A waterfront property owner would be issued rights as a function of the difference between the square footage of the existing use on his parcel and the permitted square footage under zoning.[15] A specified number of rights would be assigned for each 1,000 square

11. Fred F. French Investing Co. v. City of New York, 39 N.Y.2d 587, 350 N.E.2d 381, 385 N.Y.S.2d 5 (1976). The court in *French* invalidated a TDR scheme which did not provide a definite time for reattachment of the development rights to a parcel of property for the precise value of the development rights when reattached.

12. WALLACE, MCHARG, ROBERTS AND TODD, GEORGETOWN AREA PLAN AND DEVELOPMENT MANAGEMENT PROGRAM App. C. at 1-8 (1975).

13. *Id.* at 1. Though not cited in the report, the consultants and various public officials had discussed the possibility of transferring development rights to certain areas now under construction in Washington, D.C. *See* Von Eckardt, *Getting Charm and Height*, Washington Post, Feb. 27, 1971, § C, at 1, col. 5.

14. WALLACE, MCHARG, ROBERTS AND TODD, GEORGETOWN AREA PLAN AND DEVELOPMENT MANAGEMENT PROGRAM App. C. at 6 (1975).

15. *Id.* at 2-3.

feet of this "surplus" square footage.[16] If, for example an owner's property is zoned for 50,000 square feet and the existing use occupies 35,000 square feet, his development rights would be issued in some proportion to the remaining 15,000 square feet. The increment by which permitted densities could exceed those allowed by the zoning maps on individual transfer district proposals would be limited according to the capacity of the area to accommodate newly generated traffic.[17] That is, where expected traffic volume would exceed the capacity of the surrounding streets, the density increase permitted using development rights would be moderated.[18] Development rights would be taxed as real property and tax liabilities would be adjusted accordingly for both parties to a TDR transaction.[19]

The observer schooled in the realities of real estate economics will quickly find fault with development rights assignments made on the basis of spatial measurements such as density. There is no assurance that, at the least, the market value of development rights originating in the waterfront will equal their value to developers in the Metro route vicinity. It seems inequitable for the recipient of rights to rely on the vicissitudes of the unknown and untested supply and demand system of the newly established development rights market in recouping any value losses due to restrictive public regulations. Indeed, successful court challenges have been waged under similar circumstances.[20] Furthermore the granting to the recipient of development rights equivalent only spatially to the lost development potential on his property may just increase judicial and public resistance to such a program.

Undoubtedly, in anticipation of this difficulty, the proposed Vermont TDR scheme incorporates a more sophisticated formula. Developed by a group of prominent state environmental activists, the Vermont proposal is directed toward the control of growth and the preservation of open space.[21] In implementing the Vermont measure a local government would conduct an appraisal of each property in the jurisdiction, establishing both its current use and market values.[22] Devel-

16. *Id.* at 1.

17. *Id.* at 3.

18. *Id.*

19. *Id.* at 7.

20. Note, *The Unconstitutionality of Transferable Development Rights*, 84 YALE L.J. 1101 (1975).

21. L. Wilson, A Land-Use Control System Based on Transferable Development Rights 1-7 (1974) (unpublished paper for Vermont Natural Resources Council).

22. *Id.* at 4.

opment rights would be apportioned to each property owner as a function of the difference in these values.[23] The sum of the differences for all eligible properties in the jurisdiction would constitute the dollar value of the maximum permissible volume of development.[24] A new master plan would be prepared restricting new development to the volume represented by this dollar value.[25] In order to develop his land to the maximum allowable extent, the owner would have to purchase development rights equivalent to the anticipated value of the new use, established by an up-to-date appraisal.[26] If a developer wanted to build on a newly-acquired property, it would be necessary for him to obtain rights equivalent to the difference between the appraised present use value and the sale price (less any development rights already attached to the property at purchase).[27] After a specified period of time, development rights prices would be established on the open market, rather than through appraisal.[28]

As should be evident, the Vermont TDR variant is more sensitive than the Georgetown scheme to the intricacies of accurate valuation of development rights and owner claims to adequate compensation. Under the latter proposal, development rights are issued in units corresponding to a spatial measurement, to wit, the square footage permitted under the zoning code which has not been "absorbed" by the property's existing use. The Vermont proposal however, would allocate rights to each owner as a function of the difference between the market and existing use values of his property.[29] Basing these values on current sales and appraisal techniques would seem to decrease the probability that owners would receive less compensation for development potential lost due to restrictive public regulations than could occur under TDR systems which utilize spatial measurements. Unlike the Georgetown Waterfront scheme, the Vermont TDR proposal could take into account the effects of nearby public improvements and locational variables in valuation assignment of development rights to eligible property owners through commonly used professional appraisal techniques.[30] Though spatial unit measurement of development

23. *Id.* at 5.
24. *Id.* at 5-6.
25. *Id.* at 6.
26. *Id.* at 5-6.
27. *Id.*
28. *Id.*
29. *Id.* at 4.
30. *Id.* An obvious difficulty with measuring development rights in terms of the

rights undoubtedly would be less troublesome and time-consuming administratively for local officials, the employment of dollar value appraisal methods would seem to be worth the extra time and resources necessary, especially if the threat of costly court challenges could be minimized.

Even if the issue of fair valuation of development rights somehow is resolved, there are other potential inequities associated with the compensatory TDR systems. Property owners and residents literally at the other end of the transfer process, in whose environs rights could be used to increase allowable densities, should be given more consideration. This group is composed primarily of developers and tenants/purchasers of their properties. Recall that the Georgetown Waterfront proposal, similar in concept to most compensatory TDR systems, would permit property owners in the historic waterfront area to separate and transfer their development rights for use by developers owning property in designated transfer districts. One might conclude that the purchasers of these rights would be absorbing the costs of preservation. The Georgetown scheme and others, however, provide that lowering zoning densities of right in transfer districts can occur, if necessary, to stimulate demand for rights.[31] In such situations the developer would have to purchase rights equivalent to the density lost due to the downzoning, if he desired to build to the originally permitted level. Obviously, these persons stand to suffer a disproportionate share of the burden of preservation costs compared to developers in other parts of Washington whose property holdings are not subject to downzoning.

Even where downzonings are not allowed however, the developer in the transfer district still could be burdened inequitably. For example, the Chicago Plan suggests that requests for rezonings to higher densities be granted, but to lower levels than asked for by property owners. The remaining margin of density needed would be purchased in the form of development rights.[32] Normally however, transfer district de-

square footage of unused building potential is that a given unit of space has widely varying values in different locations. A square foot of residential space in an historic building near a major office tower may be worth far less to potential purchasers in transfer districts where less development has occurred and land values are lower.

31. For a discussion of lowering densities-of-rights, see J. COSTONIS, SPACE ADRIFT 102-03 (1974) (hereinafter cited as SPACE ADRIFT).

32. *Id.* at 50. The authors of a TDR proposal for protecting prime farmland in Maryland suggest that the state government be empowered to acquire development rights through purchase in the open market and through condemnation. This practice, they feel, will aid in controlling the supply of development rights and therefore will help to prevent lagging demand and low prices. *See* M. BAILEY, P. FOSTER AND F. SCHNIDMAN, TRANSFERABLE DEVELOPMENT RIGHTS: ARE THEY A STEP IN THE DIRECTION OF BETTER LAND USE MANAGMENT? 1, 5 (1974).

velopers would be allowed to build to densities permitted by the existing zoning map.[33] Incremental density increases above this level could be achieved only through the purchase of a specified number of rights, subject to analyses of environmental and public services capacities, urban design considerations and market studies.[34] Developers would appear to be in a position where, at the very least, they would suffer no financial losses compared to their expected return had they purchased no rights and built only to the maximum density allowed by zoning. Indeed, it would seem that the development rights acquisition could enable them to substantially augment their financial return and would thus, constitute an attractive incentive.

Again, though, developers would be disproportionately burdened with preservation costs when compared to developers in other parts of the city able to secure rezonings, variances or other public largesse to achieve the same densities.[35] Therefore, unless these zoning changes were prohibited for similar classes of property throughout Chicago and Washington, the TDR schemes would seem to invite judicial challenge.

The Georgetown Waterfront measure raises other questions about the distribution of costs. Tenants/purchasers are another group of persons susceptible to shouldering an inordinant preservation cost of new real estate developments in transfer districts (those areas eligible to receive transferred development rights). Since the developer in the transfer district had to purchase density permissions that developers of similar properties in other parts of the city received at lower costs through conventional rezonings and variance proceedings, he will probably be forced to charge higher rents/prices. If the supply of transfer district properties such as high-rise apartments and office buildings in Washington is rather large, it is likely that most tenants/purchasers would invest outside the districts. If on the other hand, the supply is

33. SPACE ADRIFT, note 31 *supra*, at 50.

34. *Id.* at 48-52.

35. Consider, for example, the builder who wants to construct a large apartment complex in an area of Chicago located just outside the transfer district boundaries. If the site is zoned at a density and use insufficient for these purposes, he could take the conventional route and apply for a variance or zoning amendment. Though the expenses associated with this procedure in legal fees and lost construction time are not usually inconsequential, it is likely that they will not often equal the cost of purchasing development rights in an open market. This developer, then, may have a decided advantage over his counterpart in a transfer district.

Another student of TDR has expressed concern over the equitability of requiring developers to absorb the costs of preservation and ponders the ultimate effect on inner city economic development. *See* Note, *Development Rights Transfer and Landmarks Preservation—Providing a Sense of Orientation*, 9 URBAN L. ANN. 131, 155 (1975).

constrained, they might have no other option but to rent or purchase property inside of the district. Obviously, under the first alternative, developers of property within transfer districts may be penalized because they cannot compete effectively with their counterparts outside the transfer district due to variable treatment by local public officials imposed by the selective TDR program. Hence, developers are forced to shoulder a disproportionate share of the costs of preservation. Under the second alternative, tenants/purchasers are negatively affected because their market choices are limited by a restricted supply of apartments and/or offices. They may shoulder a greater share of the preservation burden in these circumstances.[36]

Speculating on the impact that compensatory-type TDR schemes would have on other groups of persons is somewhat more problematical, optimistic predictions notwithstanding.[37] For example, the effect of TDR on properties in the vicinity of land parcels to which development rights have been transferred is unclear. Values on these holdings could increase due to nearby high density improvements or, in the alternative, they could plummet if higher densities had significantly undesirable environmental effects. Commendably, the Chicago Plan attempts to minimize these difficulties through design controls, but the Georgetown and other TDR systems pay them little heed.[38]

Though some of the probable effects of compensatory TDR schemes are unclear, it is evident that there are significant, identifiable groups of people who would suffer an inordinate share of the costs of providing environmental preservation and improved land use planning services to the general public. The response of those who find fault with

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36. A similar conclusion was reached by researchers at the University of Pennsylvania's Regional Science Research Institute. *See* Berry & Steiker, *An Economic Analysis of Transferable Development Rights*, 17 NAT. RESOURCES J. 74 (1977). The authors conclude:

> Finally, we observe that a successful TDR scheme constitutes a form of protective control over the landscape such that the distribution of rents accruing to land owners in the growth and no-growth zones is in some narrow sense equitable. But the TDR approach does not take into consideration the larger question of the *equity of the consumers of floor space paying rents ultimately to owners of land and development rights*. Rather, this method passively accepts the transfer of wealth from the consumers of floor space to land owners and development rights holders and deals only with the redistributional aspects of land use control within these narrow confines.

Id. at 74 (emphasis added). Though there is obvious disagreement between this position and the present author's on the equity of TDR to affected property owners in "growth zones," there is no difference of opinion over TDR's impact on tenants/purchasers.

37. Shales, *Who Pays for Transferable Development Rights?*, 40 PLAN. 7-9 (1974).

38. SPACE ADRIFT, note 31 *supra*, at 134-44.

compensatory approaches to the transfer of development rights is illustrated by a second group of TDR schemes which is less concerned with political or legal difficulties arising out of the taking issue. Instead, these proposals, which I term "redistributive TDR measures," would attempt to distribute net losses or gains on some equitable basis to all eligible property owners. The propsed New Jersey Growth Management Program and the Carmichael proposal are illustrative of redistributive TDR measures.

III. REDISTRIBUTIVE MEASURES

Under a proposal developed for communities in New Jersey, a local government desiring to preserve fragile environmental areas would prepare a Growth Management Program (GMP).[39] The GMP would analyze ecological conditions in the jurisdiction and existing and expected public service needs.[40] It would delineate areas to be preserved and others in which development could occur.[41] The capacity of the latter areas to accept new growth would be determined.[42] From this analytical process, maximum permissible densities of development would be designated for each area. Residential development rights would be created proportional to the numbers of dwelling units or bedroom units allowed by the GMP.[43] Commercial and industrial rights could be established on the basis of permitted square footage of space in the GMP.[44] Under an optional conversion formula, residential, industrial and commercial development rights could be created as a function of the total acreage of each category permitted by the GMP.[45]

39. B. CHAVOOSHIAN, G. NIESWAND & T. NORMAN, GROWTH MANAGEMENT PROGRAM: A PROPOSED NEW APPROACH TO LOCAL PLANNING AND ZONING 1-26 (1974).

40. *Id.* at 10-13. The GMP proposal places emphasis on employment of a sophisticated analysis of environmental conditions because it is intended primarily for communities where considerable undeveloped areas (*e.g.*, farms) exist. Such an analysis is less important, of course, in heavily populated areas such as Chicago and thus, was not a major concern in the Chicago Plan as discussed by Professor Costonis. Both the GMP and the Chicago Plan however, stress the importance of careful studies of the existing and expected capacities of public service systems such as sewerage, police and fire protection and public streets.

41. *Id.* at 11-12.

42. *Id.* at 12-14.

43. *Id.* at 16. For example, one development right might equal one bedroom unit or one dwelling unit.

44. *Id.* at 16-17. For example, one development unit could equal 5000 square feet.

45. For example, if the GMP's analysis indicated that environmental and public services capacities would permit a total of 200 acres of residentially-zoned land, a

Alternatively, the authors of the proposal suggest that some combination of these techniques could be used.

Once the total supplies of residential, commercial and industrial rights have been determined, they would be distributed to each eligible property owner in proportion to the ratio between the assessed value of his property and the total assessed value of all real property in the community.[46] Each recipient would be issued a share of each "pool" of rights based on this ratio.[47] Owners of both undeveloped and developed property would receive rights, but that portion of rights "consumed" by existing buildings could not be transferred until the associated buildings were demolished.[48] Subject to the limits of the GMP, all recipients would be free to sell or use their rights on their own properties. Both the correct number and type of development rights would be needed to develop a property.[49]

The GMP measure would first identify a total supply of rights based not on existing zoning limits, as under the Chicago Plan, but rather on capacities established by the GMP's environmental and public service analysis. Next, rights would be allocated to eligible owners by a formula which proportions this premium on the basis of assessed valuation. Obviously, even if a timely, professional appraisal of all properties could establish accurate assessments, grave uncertainties could result among many property owners about personal losses and gains. If the supply of rights to be apportioned was smaller than that possible using existing zoning density criteria, logically each owner would receive fewer rights. Unless a reduced supply of rights raised the unit price, owners would suffer losses in the value of their real property holdings. The probabilities inherent in such a gamble would seem sufficiently vague to place the TDR proposal in a politically, if not legally, vulnerable situation in most communities.

Nevertheless, still another provision exists in the distribution formula to alter the market value of each owner's property. The New Jersey scheme would allocate a share of each residential, commercial and industrial type of right to each eligible owner, regardless of the current

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corresponding number of development rights could be created for distribution. If one acre of residentially-zoned land equalled one development right, 200 residential development rights would be available.

46. B. Chavooshian, G. Nieswand & T. Norman, Growth Management Program: A Proposed New Approach to Local Planning and Zoning 1, 17-18 (1974).

47. *Id.* at 18. For example, if an individual owned one per cent of the total assessed value in the community, he would receive one per cent of each pool.

48. *Id.*

49. *Id.* at 18-19.

zoning classifications on his land. To illustrate, if an owner's residentially zoned property constituted one percent of the total assessed valuation in the municipality, he would receive one percent each of the supplies of residential, commercial and industrial rights. Typically undeveloped property zoned commercial or industrial commands a higher unit price than comparable property zoned residential. Hence, the owner is likely to gain from the transaction at the expense of others. This principle is illustrated by comparing the owner's situation above with that of a second owner whose land holdings are industrially zoned and also constitute one percent of the total assessed valuation in the municipality. The development rights separated from the second owner's property would be added to the industrial rights "pool" for later redistribution. Because more owners would subsequently be eligible to receive industrial rights, the second owner would receive fewer in return and instead, would receive an allocation of residential and commercial rights, of lesser unit values.[50]

Clearly, the GMP system would attempt to redistribute development potential (in the form of development rights) more equitably than any of the compensatory TDR schemes. However, another TDR plan, the Carmichael proposal, is even more revisionary in the degree to which it would redistribute development. The Carmichael proposal[51] would preface rights allocation with a relatively sophisticated McHargian ecological analysis[52] and a study of excess capacities in existing public services. A plan for the jurisdiction would be prepared prescribing maximum allowable densities and land use types, as indicated by the ecological and public services studies. For discussion purposes Carmichael suggests establishing a residential development rights supply

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50. In effect, the second owner would be forced to "trade in" a certain proportion of the assessed value of his industrially-zoned land. This amount is represented by the difference between the value of his industrial development rights and the value of the mix of residential, industrial and commercial rights he is allocated from the "pool." In other words, the first owner could realize a potential windfall and the second owner, a partial wipeout.

51. Carmichael, *Transferable Development Rights as a Basis for Land Use Control*, 2 FLA. ST. U.L. REV. 35 (1974).

52. I. MCHARG, DESIGN WITH NATURE 103-15 (1969). Professor McHarg proposes an analysis of suitability for development based upon the land's ecological carrying capacity. A series of map overlays on transparent sheets would be prepared on a standard base, each of which would depict the condition of a particular environmental element (*e.g.*—depth to bedrock, acquifer recharge area, topography). Numerical ratings would be assigned to denote the extent to which sections of the mapped area would be harmed by development. Low ratings would prohibit development whereas higher ratings would indicate the types of engineering modifications necessary to permit development of greater intensity.

equivalent to one right for each dwelling unit permitted by the plan.[53] As we have seen, the notion of creating rights as a function, not of the zoning map but rather, of a detailed analysis of natural and public services capacities, is found also in the GMP proposal. Unlike the GMP however, the Carmichael formula would *distribute* development rights regardless of either permissible densities under the plan or under the zoning map.[54]

This variation of the Carmichael TDR scheme goes even further than the New Jersey GMP measure in attempting to redistribute a publicly created good. The latter shows some deference to original zoned densities by distributing rights as a proportion of assessed valuation (which typically, is calculated from market value, determined in part by a parcel's zoning classification).[55] It appears that, however tenuously, the New Jersey formula attempts to address not only the economic issue of development rights redistribution but also, the legal issue of an uncompensated taking. The Carmichael TDR variant, on the other hand, would appear to minimize the importance of the property owner's original economic expectations and the just compensation issue.

Perhaps uneasiness over this rather ambitious formula contributed to Carmichael's later discussion of alternative distributive devices. He suggests, for example, that his original formula could be modified such that a percentage of rights would be issued on the basis of acreage owned and the remainder on the basis of some index of land suitability for development.[56] This reformulation would seem to narrow the gap somewhat between the Carmichael and New Jersey proposals although, as Professor Carmichael acknowledges, there are still many uncertainties associated with the taking issue:

> The assertions made in this article about the destruction, creation, transfer and bestowal of value by zoning practices should be

53. Unfortunately, Professor Carmichael discusses industrial and commercial development rights in highly speculative terms. Therefore, no comments are warranted here.

54. Carmichael, *Transferable Development Rights as a Basis for Land Use Control*, 2 FLA. ST. U.L. REV. 35, 51 (1974). For example, assume that Owners A & B each has 100 acres of residentially zoned land. The zoning map permits one and two dwelling units per acre, respectively, on their properties. A & B both would be allocated 100 rights. Assuming residential rights have been created at one right per dwelling unit permitted in the new plan, each owner, in effect, would have rights fungible as permission for 100 dwelling units. Under the zoning map, Owner A would have been allowed 100 units; therefore, ostensibly, he has neither gained nor lost under the Carmichael formula. Owner B though, would have had permission for 200 dwelling units under zoning; he has lost approximately 50 per cent of the value of his property according to this criterion.

55. *See* text accompanying note 46 *supra*.

56. Carmichael, *Transferable Development Rights as a Basis for Land Use Control*, 2 FLA. ST. U.L. REV. 35, 101 (1974).

fully verified and documented. Special attention should be given to the precise dimensions of the taking problem. In both cases, the adjustments of entitlements and the avoidance of inequities that would hopefully result from the use of development rights should be fully explored.[57]

IV. CONCLUSIONS ON TDR

The preceding discussion has attempted to show that both compensatory and redistributive TDR measures raise timorous doubts about their societal impacts. That they could upgrade land use planning and management practices and preserve environmental and historic resources is plausible at the least. That the compensatory TDR approach could do so without violating legal requirements posed by the taking issue is also not contested. Compelling arguments both supporting and refuting this position have been advanced.[58] It is also a defensible position that the redistributive approach could spread the economic benefits deriving from a publicly created commodity such as development rights over a broader population. But, under either compensatory or redistributive approaches it seems an inescapable conclusion that some population groups would be more heavily burdened with the costs of achieving TDR's objectives than would others. Those who relinquish an increment of property value in the reallocation of industrial rights under the New Jersey GMP or Carmichael schemes, for example, to some extent are analogous to devlopers and tenants/purchasers under the Georgetown and Chicago TDR measures. Preservation costs are imposed on each group under formulae that bear little obvious relationship to criteria based either on measures of horizontal or vertical equity.[59] Thus, both types of TDR measures maldistribute costs as among the population groups to which they are directed.

57. *Id.* at 106.

58. Without doubt, the most forceful and perceptive arguments buttressing the presumed legality of TDR have been made by Professor Costonis. *See* SPACE ADRIFT, note 31 *supra*; Costonis, *Development Rights Transfer: An Exploratory Essay*, 83 YALE L.J. 75 (1973). For critical commentary, see generally, Berger, *The Accommodation Power in Land Use Controversies: A Reply to Professor Costonis*, 76 COLUM. L. REV. 799 (1976); Note, *The Unconstitutionality of Transferable Developmental Rights*, 84 YALE L.J. 1101 (1975); Note, *Development Rights Transfer in New York City*, 82 YALE L.J. 338 (1972).

59. Under horizontal equity, persons of comparable economic circumstances would pay at generally comparable rates in order to preserve an historic or environmental resource. Under vertical equity, persons of unequal status would pay in accordance with their financial ability to do so. The concept of a progressive tax system, for example, illustrates both horizontal and vertical equity.

Professor Costonis alludes to the equity argument in his contention that TDR would "close the externalities loop." Costonis, *Development Rights Transfer: An Exploratory Essay*, 83 YALE L.J. 75, 100 (1973). That is, the costs imposed on a community from

Not only do these measures fail the ability-to-pay test, but their costs are even more inequitably skewed when compared to the total proportion of a given population that is beneficiary to TDR's presumed preservation services. Theoretically, a protected resource such as scenic open space or a historic mansion is a public good. That is, it is a commodity which, "if available to anyone, is equally available to all others."[60] To be sure, in practice TDR's preserved resources are not likely to be equally accessible to *all* income or age groups in a jurisdiction. But it is just as certain that those who do have access and can visually enjoy a verdant meadow or an Italianate Victorian townhouse compose a considerably larger population than the burdened groups identified under compensatory and redistributive TDR measures. Therefore, it would seem compellingly apparent that TDR schemes of whatever stripe are likely to fail a test of equitability based on the criterion of benefits derived.

Unfortunately, the courts have dwelled rather restrictively on the compensation uncertainties associated with TDR and thus, have not chosen to explore these more difficult equity issues. The recent TDR cases *Fred French Investing Co. v. City of New York*[61] and *Penn*

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environmental degradation and the resultant public services necessary to reduce its impact typically, are external to the economics of the development process. The community, he maintains, must absorb these costs through taxes and other charges imposed by local governments. Requiring the initiator of these burdens, the developer, to pay some or all of the costs associated with them is an important purpose of law, he claims, and thus, justifies requiring him to purchase development rights in order to exceed existing zoned densities.

Unhappily, Professor Costonis' perceptive argument was developed no further here. The methodology by which to compute the distribution of the costs of land development to their rightful bearers is extremely complex. *See, e.g.*, T. MULLER, FISCAL IMPACTS OF LAND DEVELOPMENT 1-60 (1975). The myriad revenues accruing to the community in the form of taxes, fees and user charges, as well as new employment from high density development, render the identification of community benefits at least as difficult as the determination of community impacts or negative externalities. It is by no means apparent then, that Professor Costonis' argument dispenses with legitimate concern over TDR's questionable equity implications.

60. Margolis, *The Demand for Urban Public Services*, in ISSUES IN URBAN ECONOMICS 539 (H. Perloff and L. Wingo eds. 1969).

61. 39 N.Y.2d 587, 350 N.E.2d 381, 385 N.Y.S.2d 5 (1976). The case involved the rezoning of an apartment complex in New York City to a park classification which prohibited demolition and redevelopment of the site to more intensive uses. The Tudor Parks complex had incorporated two private parks for use of its residents. Under the rezoning, these parks were to be open to the public. As compensation, the owners of the complex were given permission to transfer the development rights to other lots in the general vicinity of Tudor Parks in order to achieve greater densities on those sites than was possible under existing zoning categories. However, the conversion of the parks from private to public use was to occur even before the development rights transfers took place, thus depriving the owners of their property before the market for (and

Central Transportation Co. v. City of New York[62] do not cast much illumination on the equity issue.

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therefore, the value of) development rights could be ascertained. The court ruled in favor of the owners and affirmed that the tenuous nature of development rights value did not, in fact, constitute just compensation in the Tudor Parks arrangement. In addition, it noted that the properties zoned strictly for public park usage had been deprived of any significant financial value and thus, that the park rezoning decision amounted to a taking. *See* 90 HARV. L. REV. 637 (1977); 14 URBAN L. ANN. 283 (1977).

62. 50 App. Div. 2d 265, 377 N.Y.S.2d 20 (1975), *aff'd*, 10 E.R.C. 1389 (N.Y. Ct. App. 1977). The decision involved a plan by the owners of Grand Central Station in New York City to build a 59-story office tower above the landmark Beaux Artes-style building built in 1913. Preservationists staunchly opposed Penn Central's efforts to seek a compromise between preservation of the terminal and redevelopment to higher income producing uses. The city denied permissions necessary to execute the reconstruction project, granting Penn Central the right to transfer the terminal's development rights to nearby sites thus, increasing existing zoned densities at those locations. Penn Central claimed that a taking had resulted because neither the existing terminal usage of Grand Central nor potential sale of development rights constituted just compensation for the lost return attributable to an office tower.

The appellate court upheld the lower court's decision that a taking had not occurred. It asserted that market demand for development rights in the terminal's vicinity was more promising than under Tudor Parks and that the existing or potential uses of the terminal were sufficiently economical to thwart the charge that preservation of the building amounted to a financial hardship. Most importantly, the court asserted that the principle of just compensation, as under eminent domain proceedings, did not apply in *Penn Central* and that the plaintiffs were not due compensation according to the return likely if the tower were incorporated into the terminal. Instead Penn Central had a right only to financial return commensurate with the proportion of the property's value deriving from the company's investment.

> A fair return is to be accorded the owner, but society is to receive its due for its share in the making of a once great railroad. The historical, cultural and architectural resource that remains was neither created solely by the private owner nor solely by the society in which it was permitted to evolve.

10 E.R.C. at 1392.

Penn Central confines itself to defining the limits of compensation due the Penn Central Railroad and the rightful benefits accruing to society from prior public largesse. In so doing, the court comes down foursquare on the side of partial public recoupment of values created in part by governmental action (*e.g.*, government grants for Penn Central land, real estate tax exemptions, service to the terminal by the city-owned public transit system).

Professor Costonis, in effect, anticipated the court's decision in *Penn Central* four years earlier. "Development rights transfer promises to redress the most grievous consequence of the American Property system's bias in favor of private property rights; the government's failure to recoup for public use an appropriate measure of the values that it creates in privately held land." Costonis, *Development Rights Transfer: An Exploratory Essay*, 83 YALE L.J. 75, 97-98 (1973).

Nevertheless, nowhere does the court grapple with the broader equity issue inherent in the question of who are the ultimate financiers of Grand Central's preservation. The transferable development rights, an essential element in the compensation scheme, are to be purchased by property owners of sites in the terminal's general vicinity. In effect, then, they become partial subsidizers of the building's preservation. In return for purchased density increases, which presumably are available through conventional zoning change procedures, they and their ultimate tenants/purchasers help to pay for a

The transfer of development rights concept purports to achieve a public purpose virtually at no cost to the public fisc. Indeed, therein lies the chief attraction to its proponents. Nonetheless, if the abovementioned liabilities are to be nullified, it appears necessary to relinquish this feature. The cost of protecting an important environmental or architectural resource must be borne not merely by a few developers and perhaps, several tenants/purchasers, but rather in a more equitable arrangement, by a broader spectrum of society. It is not surprising, then, that at this writing, one such proposal already has emerged.

A. *Public Intervention in the Transfer Process: An Alternative*

The Puerto Rico Plan represents a decided departure from a literal TDR device.[63] Like most TDR schemes, it would impose restrictive land use controls where dictated by analysis of environmental, public services and design conditions.[64] Landowners who claim that they are denied a reasonable return from their property by this action could submit to a rather elaborate Commonwealth adjudication procedure.[65] If their contentions are denied, no compensation would be forthcoming. If their contentions are upheld however, various alternatives, including the public purchase of development rights, could be used to provide compensation.[66] An environmental trust fund would be established to finance property acquisitions by the government.[67] Its capital would derive from Commonwealth government appropriations, private gifts and federal grants.[68] The fund, under Commonwealth directorship, would be empowered to sell development rights and other interests in land, using the revenue for further property acquisitions.

Transfer districts would be delineated through the same types of rigorous analytical procedures as preservation districts. Eligible property owners within a district would be able to purchase development rights and other premiums from the Commonwealth at prices estab-

public good. Notwithstanding the voluntary nature of these purchases, the court's scrutiny is sorely needed here to clarify the cloudy dynamics of equitability. It remains unclear in *Penn Central* why a rather narrow class of New York City residents must bear the ultimate burden of costs for a benefit which is available virtually to all those who live in or visit the city.

63. J. Costonis & R. DeVoy, The Puerto Rico Plan: Environmental Protection Through Development Rights Transfer (1975).

64. *Id.* at 9-11.

65. *Id.* at 13-16.

66. *Id.* at 23.

67. *Id.* at 9.

68. *Id.*

lished through negotiations or public bidding procedures.[69] Each property would be designated a certain density of right, based on the environmental, public services and design analyses. Owners would be free to build to that level, subject only to conventional regulations such as subdivision codes.[70] However, a second, higher "tier" would be delineated, where compatible with the analyses.[71] Owners who purchase the prescribed number and type of development rights would be allowed to exceed the density of right and build to this second level.[72]

The Puerto Rico Plan places special emphasis on the process by which the determination to compensate is to be made. Though too complex to describe adequately in this Article, its pivotal feature is a concept termed "reasonable beneficial use."[73] It would be the role of the Commonwealth Board of Appeals to determine to what extent, if any, a claimant's allowable property uses, as designated by the land use plan, were of lesser value than the reasonable beneficial use.[74] If, for example, the board adjudged this use to be agriculture and the parcel under appeal had been designated for agricultural uses by the plan, no compensation would be due. If on the other hand, the reasonable beneficial use was deemed to be multi-family housing, the same parcel could merit compensation for the net difference in value. The authors of the Puerto Rico scheme specify several criteria by which the reasonable beneficial use for each parcel of property under appeal is to be established.[75]

The transfer aspect of the Puerto Rico Plan is more metaphorical than literal. Under no circumstances would development rights transfers occur between private citizens, as under the TDR measures described earlier. The prices of rights and hence, the compensation received, would never be determined solely by the vicissitudes of market supply and demand. Each landowner could appeal his property's designation under the plan and where found to have been denied a reasonable return, could obtain appropriate relief from the Common-

69. *Id.* at 9-10, 19.

70. *Id.* at 10.

71. *Id.*

72. *Id.*

73. *Id.* at 16.

74. *Id.*

75. *Id.* Among the criteria specified by the authors are: (1) claimant's current total investment in the property, (2) the degree of harm posed to the environmental resource by the proposed development, (3) development potential at the site, as influenced by location, access, size, shape, topography, proximity to sewer and water service and liability to flooding.

wealth.[76] This compensation would be fixed in a formal appeals process, with the option to submit resultant decisions to the judiciary.[77] This procedure parallels appeals and court review alternatives available to property owners in conventional zoning cases in the United States.

As we have seen, there are other resident groups affected by a TDR measure besides those owners who receive compensation for lost development potential. How would these persons fare under the Puerto Rico Plan's intervention in the private transfer process? The answer derives in large measure from the fact that the Plan obligates the public fisc to underwrite the costs of environmental protection.[78] In compensatory and redistributive TDR approaches, these responsibilities are imposed on certain members of certain population groups (*e.g.*, developers in transfer districts) and would seem to be especially inequitable when other members of the same groups (*e.g.*, developers in other parts of the community) are able to obtain density increases without paying for them. The Puerto Rico Plan appears to be a departure point, at the least, for a system which could distribute protection costs more equitably among those who derive the benefits. By intervening in the transfer process between seller and buyer of premiums such as development rights, the Plan would break the dependency linkage between land protection and sustained demand for rights that exists in compensatory and redistributive TDR systems. A protection mechanism would exist regardless of the magnitude of demand for development rights.[79]

Certain advantages in the Puerto Rico Plan are noteworthy. First, the public sector, being the sole source of compensation, would be in a position to decide in each case if and to what extent compensation is necessary. If compensation is to be proferred, the appropriate government can use its full faith and credit to guarantee that it will be forthcoming. Under previously described TDR schemes, these deci-

76. *Id.* at 18.

77. *Id.*

78. *Id.* at 9. Though the Puerto Rico Plan would pay direct compensation through development rights transfer purchases, it would also empower the administering agency to provide alternatives to compensation such as the granting of a zoning variance, where appropriate.

79. Confidence in the value of a public intermediary in the transfer process is shared by others. *See* Field & Conrad, *Economic Issues in Programs of Transferable Development Rights*, 51 LAND ECONOMICS 338-39 (1975).

sions are rendered moot through resort to the market system and its attendant uncertainties.[80] Second, the public sector is in a better position under Puerto Rico-type arrangements to decide how its preservation dollars should be allocated so as to encourage the optimal public benefit from its investment. Obviously, once a TDR system designates which environmental resources are to be protected, the number, type, location and timing of those actually preserved through the transfer process are left to the vagaries of market supply and demand forces. Participation in this market is limited to those persons permitted under each TDR measure who are wealthy enough to do so. In effect, they would decide for the public what resources will be preserved.

Finally, the governmental assumption of preservation costs under the Puerto Rico Plan offers considerably more potential than either compensatory or redistributive TDR schemes for distributing the economic burdens according to some just, proportional basis. These latter approaches falter most severly by assigning the costs of protecting historic buildings, farmland and other resources to a relatively small proportion of a community's population. This condition seems most inequitable when compared to the much broader distribution of benefits accruing to citizens as a result of these protection measures. In effect, a relatively small number of people are forced to subsidize a resource, the benefits of which will accrue to a much larger number of people. Certainly, that some should pay more than others, in principle, is acceptable, if costs are distributed on the basis of ability-to-pay. But, that some group should finance *all* of the costs when benefits from resource preservation, though not readily calculable, accrue considerably more widely, seems manifestly unjust. A Puerto Rico-type measure might offer a governmental vehicle by which more equitable horizontal and vertical distributions of costs and benefits could be achieved.[81]

80. Nearly all of the TDR measures publicly proposed to date require the transfer of development rights to occur between individual buyers and sellers, operating analogously to traditional procedures in local real estate markets. The market value of a given development right therefore, is dependent on supply and demand factors. Under the Puerto Rico Plan, when compensation is deemed appropriate, it is underwritten by the Environmental Trust Fund, thus avoiding the problem of undervalued development rights.

81. At least one local government recently has implemented a program akin to the Puerto Rico scheme. Suffolk County, New York is proposing a $60 million bond issue to purchase development rights in order to preserve agricultural land. The enacting legislation suggests that, eventually, some of the purchased rights could be sold by the county government to permit greater densities in portions of the county where growth is desired. *See* Peterson & McCarthy, *These Farmers Said, 'No Sale!'*, 41 PLAN. 20-21 (1975).

To be sure, demurrers can be expected from students and victims of tax policy, citing myriad examples of patently maldistributed economic burdens. Nonetheless, for all the shortcomings of traditional devices to allocate public costs fairly, it is not obvious that the concept of taxation, *per se* is inconsistent with that objective. Compensatory and redistributive TDR measures, on the other hand, seem inherently at odds with such an end.

The foregoing judgements notwithstanding, one caveat is due here. To this point, pessimism has been expressed for the use of compensatory and redistributive TDR schemes as integral and dominant land use control systems. These observations do not necessarily negate the value of occasional TDR applications on a *limited*, property by property, voluntary basis within a given local government jurisdiction. It is conceivable that in isolated circumstances the technique might be used with minimal violence to the criteria raised in the present Article.[82] As should be evident, TDR is a complex concept with a myriad of variants. This characteristic alone would suggest that it deserves more intensive scrutiny and testing than has occurred to date before final judgments are made.[83] At the current state of their developmental history however, both compensatory and redistributive TDR systems appear to have engendered optimism somewhat inconsistent with certain of their ostensible limitations.

82. 2 *Record of the Public Hearing Before the Assembly Municipal Government Committee on Bill No. 3192* 45x-49x (1975) (testimony of D. Gale). This legislation is not to be confused with the New Jersey GMP proposal discussed in the present Article.

83. Others lament the paucity of efforts at analytical scrutiny applied to TDR to date and call for an evaluation of the impacts of TDR and other land use controls on the "total social fabric." *See* Drummond, Book Review, 7 GROWTH AND CHANGE 52 (1976) (M. LEVIN, J. ROSE & J. SLAVET, NEW APPROACHES TO STATE LAND-USE POLICIES); F. JAMES & D. GALE, ZONIÑG FOR SALE: A CRITICAL ANALYSIS OF TRANSFERABLE DEVELOPMENT RIGHTS PROGRAMS 1-39 (1977). Perhaps the most ambitious economic analyses of TDR to date has been performed by the Regional Science Research Institute. *See* note 36 *supra*.