the site-value tax: its potential effect on urban and county land uses in north carolina

Of the many factors deemed responsible for the decay of our central cities, one which is consistently cited as a major problem is the property tax. It is charged with encouraging urban blight and ugliness, generating urban sprawl and the inefficient use of land, and unfairly burdening those who are least able to pay.[1] Cities and states have reacted to these problems in a piecemeal fashion, enacting various tax abatement or exemption programs when inequities and inefficiency became too onerous. But these programs are limited in their effectiveness by their lack of a systematic approach to the inherent weaknesses of the property tax system.

Often proposed as a reasonable alternative to the current property tax system is what is known as a site-value tax. Henry George, an American economist, began lauding its virtues almost one hundred years ago.[2] But in spite of the theoretical validity of arguments made by its proponents, few taxing jurisdictions have seriously considered site-value taxation as an alternative to the present system, and fewer still have implemented any form of it.[3]

Economic theorists have thoroughly explored the expected effects of the tax, but there is a dearth of research focusing on the actual assessment figures of existing taxing jurisdictions and the effect which site-value taxation would have on specific types of land uses within the community. This paper, after briefly reviewing the theoretical arguments in favor of site-value taxation, investigates the effects which a site-value taxation system would have on various land use categories in two North Carolina urban centers and their counties—Charlotte and Mecklenburg County, and Durham and Durham County.

definition of site-value taxation

Under current tax structure, the governing body assesses land and improvements to the land in it's jurisdiction. This combined value constitutes the jurisdiction's tax base. When revenue requirements are determined, the tax rate is set by dividing the tax base into the revenue requirements figure. Thus, if a county has a total of $20,000,000 worth of land and buildings, and requires $400,000 a year to provide services (assuming the property tax to be the sole basis of support), then the rate is set at 2% (400,000/20,000,000). A property owner with a $34,000 home on a $16,000 lot would pay .02 x $50,000 or $1000 in taxes.

Under a site-value tax system, only the land in the jurisdiction is appraised and its total value acts as the tax base. Assuming the land in this hypothetical jurisdiction is valued at $8,000,000, a 5% levy would be necessary to provide the $400,000. The same homeowner, with a $16,000 lot, pays 5% of the value of his lot, or $800 in property taxes.

As generally conceived, the site-value tax system would ignore the manmade improvements to a piece of property. The value of a parcel is determined by its expected income in its highest use, given any locational or zoning restrictions which might apply to it.[4] The actual use of the parcel would be irrelevant. The site-value tax does, however, take into account a number of features which make that parcel more attractive to development, such as sewer and water connections, access to transportation routes and facilities, and grading.

arguments in favor of the site-value tax

Proponents of the site-value tax claim that their system benefits urban centers in a number of ways. First of all, it is a neutral tax. Under the current system, any benefit received for improving the land is decreased to some measure by an increase in the assessed value, and the tax levied thereupon. The extent to which the tax acts to discourage the improvement of property depends upon the tax base and revenue needs of a particular jurisdiction, but in any case, the effect of the tax is negative.[5]

The site-value tax, on the other hand, fixes the amount of tax paid on a particular parcel regardless of development which occurs on it. Because the benefit of any income-producing improvements to the land will accrue in full to the owner (taxes will not

Edwin Chester is a third year student in the joint degree program of the Department of City and Regional Planning and the School of Law at the University of North Carolina, Chapel Hill. He prepared the original draft of this paper during the summer of 1975 as an intern for the Office of State Planning, Raleigh, North Carolina.

increase with the increased income value of the improved property), no disincentives exist to put the land to its best use in order to maximize profits. The decision as to the type and scale of development depends upon market constraints other than the property tax, whose effect is neutralized.

Such a tax structure assists in solving problems of urban blight and ugliness.[6] Because the site-value tax does not affect property improvements, property owner's are not threatened with increased bills if they decide to renovate their premises—and need not be concerned the exterior appearance of buildings will increase taxes.[7] [8]

Site value taxation proponents also argue their system aids in deterring urban sprawl by encouraging more intense development near central cities.[9] The paradoxical element of the sprawl problem lies in the fact that many cities harbor large amounts of vacant land within their boundaries,[10] and yet constantly annex new areas which must be provided with roads, schools, sewer and water—expensive services already available within the city limits. The site value tax would substantially increase the cost of holding property vacant since about 60-70% of a city's tax base (the improvements to the land) is shifted to the land itself.

"(the site value) tax structure assists in solving problems of urban blight and ugliness."

encourages development

A site-value tax encourages development of existing vacant land in one of two ways: 1) Because the tax burden on the land is much greater under the site value system, the owner is motivated to develop the land to provide a steady stream of income for the payment of taxes; 2) the current system makes it relatively inexpensive to hold land out of productive use either consciously (by the speculator) or inadvertantly (by one who inherits property and does nothing with it out of sheer inertia). The increased tax burden encourages the transfer of that property, the value of which has decreased with the new burden, to someone better able or more willing to put the land into productive use.

An important part of this analysis, however, is the assumption that the demand exists to support the expansion of this productive capability.[11] In cities where a healthy demand does not exist, a site-value tax might result in a large number of tax delinquent judgments and subsequent city ownership of substantial amounts of property.[12]

equitable shifting of the tax burden

There are three lines of reasoning to support the claim that site-value taxation may result in a more equitable distribution of the tax burden: (1) it tends to shift the burden to those who can best afford it; (2) it acts to prevent the shifting of increased tax costs

A site value tax system would encourage a more intense and compact development of urban land

Photo by John Manuel

from the land owner to the tenant or ultimate consumer; and (3) it results in the recapture of socially created values.

Shifting the tax from the buildings and improvements to only the land itself will tend to put the tax burden on the wealthier individuals and corporations. Under either tax system land is an expensive commodity to invest in and to hold because of its unique nature and limited supply. As a rule, only the wealthy possess the liquid assets necessary for the initial equity payment and the further additional assets necessary to finance a piece of property of investment quality (large suburban tract or smaller inner city tract). In general, it is impractical to buy land in small bits, as transfer costs are high and a parcel's value usually increases more than proportionally with its size. It is far more convenient for even upper middle income investors to place their money in stocks, bonds, or savings certificates where the entry threshhold and transaction costs are relatively low. Thus, the emphasis on taxation of the land under a site-value tax system will tend to increase the tax burden of the wealthier individuals who can afford to invest in land.

Netzer argues that these 'wealthier' land owners would be unable to pass the increased tax expenses on to the consumer or tenant, because under reasonably competitive conditions, shifting is possible only when supply can be reduced. The supply of land is, of course, fixed, and a landowner could not be expected to withdraw his land from the market, because that would not remove his property from the tax rolls, but would merely decrease the income he could generate to cover the increased tax expenditures.[13] This is to be contrasted with the situation in which one taxes improvements to land. Improvements can be decreased and withdrawn from

supply thereby increasing the price of the remaining stock.[14]

The notion that a site-value tax will lead to the recapture of socially-created values is based on the idea that a dramatic increase in land values is rarely the result of the efforts of a particular land owner, but is rather the result of activities of the neighboring land owners, or community investments in public facilities, or the general growth of the population and economy.[15] For example, the construction of a fire station or highway can dramatically increase the value of a nearby parcel providing a windfall to the landowner as a result of community expenditure. Under either the site-value or current tax system the landowner's taxes will increase with the increase in land value, but the site-value tax would recapture a larger portion of the windfall because of its emphasis on the land value.[16]

affect on land uses

It seems clear that the site-value taxation could have beneficial effects on urban areas and their residents if current economic theory is correct in its analysis of the situation. What is not as clear is the effect the tax might have on specific types of land use. What little research has been done on the shifting of the tax burden among land use classes is inconclusive, as it is based on broad estimates of land-improvement ratios in various land use groups, and not on actual assessment data.[17] The data presented below were gathered to attempt to analyze the effects which a site-value tax might have in two North Carolina city-county areas.

the study areas

Durham and Mecklenberg Counties were chosen for the study, for the simple reason they were the only counties in which assessment figures were broken down into land and improvement components. In order to study the effects of a site value tax system on specific classes it is essential that the tax rolls include estimates of land vaules and improvement values separately. No other North Carolina counties have made the effort to assess property values by this more detailed method.

Photo by John Manuel

Apartment complexes would benefit greatly from the switch to a site value system

methodology

The data were available only in dollar amounts for each category (Residential, Manufacturing, Trade, etc.) of land use. Values for all classes were first summed to determined the value of the 'tax base'. This tax base figure was computed both for the combined land and improvements to establish the value of the current tax base (combined tax base), and then for only the land components to determine a value of the tax base under a site-value system (the land tax base).

In order to determine the share of the tax base which each land use represented under the current system, the combined land and improvements value for each class was divided into the 'combined tax base'. To calculate the share of the tax base represented by each class under a site-value tax the land component of each class was divided into the land tax base. Once the share of the tax base under each system was established, the shifting of the burden under a site-value system could be measured by comparing the share of each class under the current system to the share which each would represent under the site value tax system.

For example, imagine a taxing jurisdiction in which there were only residential land uses and manufacturing land uses. The land used for residential units is worth $200,000 and the buildings are worth $500,000. The land used for manufacturing is worth $50,000 and the buildings are worth $250,000. Under the current system the 'combined tax base' would be $200,000 + 500,000 + 50,000 + 250,000 = $1,000,000. The residential sector would represent 700,000/1,000,000 or 70% of that tax base and would pay 70% of the property taxes levied. Under a site-value tax system, however, the tax base would include only land values, and thus the 'land tax base' would be $200,000 + 50,000 = $250,000. The residential sector would then make up 200,000/250,000 or 80% of the tax base and would then pay 80% of the taxes levied. The residential sector's share of the tax burden would increase by about 15% under site-value tax system.

In order to evaluate the effect of a site value tax on both the city and county areas outside the city, this process was applied to both the city and county areas in each of the two counties.

The following matters relate to the quality of the data and should be kept in mind when evaluating the results:

(1) The figures reflect assessments of 1968 in Durham and 1971 in Mecklenburg counties, therefore a number of parcels may have changed substantially in value during the intervening years. But, the figures should accurately reflect the values of parcels in one category relative to those of other categories. Most categories included enough parcels so even major fluctuations in the value of a few

parcels should not significantly affect the results.

(2) The 'land' value figures provided by the counties may not be actual site values, as the assessors in these jurisdictions may well have taken into account the value of the improvements on the land in their estimate of its value. This type of technical difficulty can be expected, however, even under a pure site-value system.

the effect of site-evaluation taxation on land use classes

Presentation of the data have been organized on the basis of the land use code systems used by the two counties. The data are first examined by sector, and then as a whole. The word 'category' will be used to refer to one of the broad headings such as 'Residential' or 'Manufacturing', and the word 'class' is used to designate more specific uses within each category, such as 'multi-family dwellings' or 'parking facilities'.

residential land use

The residential land use category makes up a large part of the tax base of all areas both in terms of the number of parcels and in percentage of value. In Durham city and county, it represents about 60 percent of the tax base under the current system, and about 45 percent under the site-value system. (See Figure 1) The comparable figures for Charlotte and Mecklenberg County are about 50 percent and 40 percent (See Figure 2).

"The residential land use category makes up a large part of the tax base of all the areas both in terms of the number of parcels and in percent of value."

As a class, only mobile homes seem to suffer from the switch to site-value taxation in the Durham area and Mecklenburg County. Single family dwellings pay about 20 percent less, and multi-family dwellings pay from 43 to 75 percent less, while mobile home owners' taxes will more than double in the Durham area, and nearly double in Mecklenberg County. The tax bill for mobile homeowners in Charlotte decreases, but that class represents only ten parcels.

It is important to note that within the single family dwelling class, the switch does not affect all members equally. Figures were not supplied by Mecklenberg County, but Durham separated the single family class by value of the dwelling on the parcel. The least expensive housing would suffer a substantial increase in tax liability, with the switch to site-value taxation. In the city, the rate increases 45 percent for dwellings worth less than $5000, while 98 percent in the county. These dwellings tend to be rental units which operate on a relatively thin profit margin. A switch to site value taxation would require some special treatment for this sub-class, if cities were not prepared to take ownership of a large number of parcels through tax deliquency proceedings or see rentals at the low end of the market increased substantially.[18]

manufacturing

The manufacturing sector would benefit from a switch to site value taxation in all four of the areas, although the magnitude of the benefit varies greatly. In both Durham city and county, taxes due from the manufacturing sector decreases by about 40 percent with site value taxation. In Mecklenberg County, the drop is about 60 percent, while in Charlotte only 10 percent.

Note the manufacturing sector represents only about 2.5% of the tax base of the developed areas (except for Durham County) under the site-value system.

transportation and communication

Transportation and communication sectors suffer under the site value system, with tax bills in Durham and Charlotte increasing by 65 percent and 44 percent respectively. Parking facilities are most responsible for the increase, as they represent up to two-thirds of the tax base in this category. In both cities, parking facilities would be subject to tax increases approaching 200 percent under a site value taxation system. Utilities do not show a steady pattern. Communications appear to do better under the site-value system, and therefore, must be using the land quite intensively.

trade

In Charlotte under a site-value system, wholesale and retail trade would increase its share of the city tax base from about 10 percent to about 15 percent. In Durham the tax base share for this sector would rise from about 7 percent to about 10 percent. In the counties, however, a site value system would lower the proportion by 6 percent and 24 percent in Durham and Mecklenburg, respectively. Once again, it seems land is being more intensively used in the counties than in the urbanized areas.

Although the property tax for wholesale trade parcels decreases in all areas (considerably more in the counties), retail trade would suffer. Department stores would be hard hit, especially in the cities of Durham and Charlotte where taxes would rise by 36 percent and 27 percent respectively. Grocery stores would pay considerably more in Charlotte (69 percent), and somewhat more in Durham (12 percent) and Mecklenburg County (8 percent), but substantially less in Durham County (46 percent). The reason for the wide range is not clear, especially in light of the fact there are a substantial number of parcels in each of the areas. Automobile accessories (mostly gas stations) parcels would see substantial increases in all areas, but especially in the City of Charlotte where the tax bill for this class would increase by 140 percent.

Figure 1

	DURHAM CITY			DURHAM COUNTY		
	Portion of Current Tax Base	Portion Under Site Valuation	Percent Change	Portion of Current Tax Base	Portion Under Site Valuation	Percent Change
Residential						
Total	.602	.479	-20.5	.591	.435	-26.4
Multi-family	.121	.069	-43.3	.025	.006	-75.6
Single family Valued < $5,000	.039	.056	+44.8	.035	.069	+98.0
Manufacturing	.047	.025	-46.2	.004	.003	-37.5
Transportation and Communication	.032	.053	+65.7	.006	.007	+14.5
Trade	.072	.907	+34.5	.022	.021	-6.1
Services	.097	.127	+31.2	.095	.025	-73.2
Cultural Resources and Recreation	.009	.022	+146.0	.006	.008	+29.7
Resource Production and Extraction	.003	.002	-20.8	.009	.024	+168.5
Undeveloped and Water Areas	.092	.167	+81.9	.113	.307	+171.6

Figure 2

	CHARLOTTE			MECKLENBURG COUNTY		
	Portion of Current Tax Base	Portion Under Site Valuation	Percent Change	Portion of Current Tax Base	Portion Under Site Valuation	Percent Change
Residential						
Total	.544	.407	-25.1	.48	.382	-20.4
Multi-family	.090	.058	-35.7	.025	.009	-62.4
Single family Valued < $5,000	.026	.023	-10.2	.07	.027	-61.7
Manufacturing	.022	.032	+44.5	.018	.014	-23.9
Transportation and Communication	.104	.153	+46.7	.067	.051	-24.6
Trade	.153	.137	-10.2	.096	.060	-37.9
Services	.010	.013	+32.3	.015	.022	+46.3
Cultural Resources and Recreation	.00011	.00032	+190.9	.004	.006	+57.4
Undeveloped and Water Areas	.070	.178	+154.4	.212	.418	+97.1

It is argued the site value system would discourage urban sprawl

Photo by John Manuel

services

It is difficult to compare the totals for the service category as the land use codes do not correspond exactly. Individual classes should be fairly consistent, however, and within each county, the classes should be consistent.

In Durham County, the major decrease in the burden on this category appears to be due to the difference in business services class (advertising, credit and collection, and employment services) which makes up the bulk of the county tax base in the category.

The tax on governmental service land uses increases in all four areas, and especially in the two in Durham. To the extent this represents projects like sewage treatment plants and landfills, this may not indicate a less than optimal use of the land. At any rate, under the present system that land is exempt from taxation.

The difference in tax cost change for educational services between Durham-Durham County and Charlotte-Mecklenburg County is interesting in that it increases substantially in the former and decreases substantially in the latter. The magnitude of the difference may well indicate the two counties have used different classification requirements for their land use information.

cultural resources and recreation

The most important thing to notice about the classes in the cultural resources and recreation category is each represents a very small percentage of the total number of parcels in its respective area. The data are useful in spite of this, however, because of the consistency of the direction and magnitude of change in the tax burden which the site value taxation system would bring.

Taxes in this category would go up for almost every separate class in every area, as one might expect. Parks, recreational activities and public assembly areas are by their nature not intensive users of land, and to a great extent that may be their attraction. The fact that a good portion of the parcels in these classes may be tax exempt would moderate what appears to be an undesirable effect of site-value taxation. The fact that they represent a small share of the tax base (2.2% maximum) indicates a tax exempt status for the entire category would not greatly burden other categories.

resource production and extraction

The resource production and extraction category clearly suffers under a site-value taxation system, as the land is not intensively used. All agriculture and agriculture-related classes would be subject to increased tax burdens except in the city of Durham. Agricultural uses are hurt less in the Charlotte-Mecklenberg county area than in the other areas, although the increases are still quite substantial for a business where margins are generally thin.

Again it should be noted, that in these two counties the resource production and extractive sectors represent only very small shares of the tax base (2.5% maximum), and exempting them from the tax base altogether, or allowing them some form of tax credit would not substantially increase the burden on other classes, if the city/county felt a pressing need to preserve these uses for open space and diversity. Another good argument for some preferential treatment is that unless all counties in North Carolina were to implement site-value taxation, it would put those subject to the increased tax at a competitive disadvantage.

undeveloped areas

All undeveloped areas would be subject to substantially increased tax liability under a site-value taxation system, and indeed, this has been one of the major arguments in favor of the implementation of a site value system. The tax on undeveloped land increases no less than 80 percent in each of the areas, the tax on vacant floor area increases by more than 70 percent in all but one area, and the change for the category is very substantial for all areas.

Note also that in both county areas site-value taxation would require that vacant land support 30-40 percent of the tax debt, while in the cities it would support only 16-18 percent of the burden.

Conclusion

If its proponents are to be believed, site value taxation appears to have the potential to alleviate

some of the more devastating pressures on inner city areas. Unlike the current tax system, it would not act to penalize a property owner for his efforts to improve his property. It would encourage more compact patterns of development and thus decrease the amount of money needed to finance municipal services. And, it would tend to distribute the tax burden more equitably among city residents.

The data from this study support the conclusions that the majority of current economic theorists would posit. At least initially, non-intensive users of land such as less expensive residential units, gas stations and parking facilities, undeveloped land, agricultural land, and cultural and recreational uses

"The data from this study support the conclusions that the majority of current economic theorists would posit."

are forced to pay substantially higher taxes under a site-value tax system. The higher tax cost should encourage a more intense use of these activities either by decreasing the size of the parcels or increasing the value of the improvements to the parcel. At the same time, intensive land users such as expensive single family dwellings, multi-family dwellings, and the manufacturing sector in general, pay substantially lower taxes as a reward for their more intensive use of the community land resource.

The primary difficulties encountered in the case of the site-value tax system, however, are that many of the categories which are to be encouraged to make more intensive use of their land either: (1) cannot afford to pay the higher taxes or to invest in the improvements necessary to provide more intensive use; or (2) would lose most of their value as community resources if they were to use the land more intensively. Less expensive residential units are inhabited by the poorest members of the community and to increase their shelter costs or provide any disincentive to investment in these units would increase the burden of those who can least afford to bear it. Much of the attraction and benefit to the community of agricultural, recreational and cultural land uses is the result of their non-intensive use of the land. To encourage more intensive use in these categories would be counter-productive.

Fortunately, the class of land use which, for valid social reasons, might be in need of some protection against the effect of a site-value tax, represent a fairly small percentage of the tax base. Altogether, the classes of dwelling units worth less than $5000, resource extraction and production (primarily agriculture), and cultural and recreational uses do not represent more than about 8% of the tax base under a site-value tax system. Property taxes would not need to be foregone completely, but an abatement program could keep tax expenses at current levels without substantially increasing the burden on the other classes of uses.

Footnotes

[1]Department of Housing and Urban Development, *A Study of Property Taxes and Urban Blight*, January, 1973.

[2]Henry George, *Progress and Poverty; an Inquiry into the cause of the Industrial Depressions and of Want with Increase of Wealth; the Remedy*, (N.Y., Robert Schalkenback Foundation, 1962).

[3]Among the major obstacles to a site-value tax are the uniformity clauses found in most state constitutions, which require the taxation of all real property at a uniform rate (See N.C. Constitution Article V, Section 2(1) and Hajoca Corp. v. Clayton, 277 N.C. 560, 178 S.E. ed 481 1971). In those states where legislatively designated classes of property may be taxed at a different rate or exempted altogether [See NC Constitution Article V, Section 2, (2) (3)] the constitutionality of a site-value system would be left to the interpretations of the specific statues by the state courts.

[4]The technical difficulties which would be encountered in determining a pure 'site value' can be expected to be substantial. See Donald Hagman, "The Single Tax and Land Use Planning: Henry George Updated", 12 *U.C.L.A. L. Rev.* 762, 774 (1965). Whether precise assessment would be any more difficult under a site-value tax than it is under the current system is open to speculation.

[5]Schaaf argues to the contrary, that the present *ad valorem* tax is the neutral tax, in that it does not discriminate between land and improvements investments. Investors are not encouraged to invest their money in either the land or the improvement component because they will be taxed equally under any decision. A.H. Schaaf, "Some Uncertainties About the Desirability of Site-Value Taxation", *Tax Policy*, Vol. XXXVII, Sept.-Dec. 1970, p 34.

[6]But see L.A. Dougharty, "Forces Shaping Urban Development: The Property Tax" (Santa Monica, California, The Rand Corporation, June 1973) at p. 19 in which the author concludes that despite the weight of current opinion on this matter, empirical evidence has not yet conclusively proven that there is a direct relationship between the property tax and urban blight.

[7]Although this argument appears to be deductively sound, a recent study carried out for HUD has indicated that a fear of reassessment is not a major deterrent to the maintenance and renovation of property. George Petersen, *Property Taxes Housing and the Cities*, (Washington, D.C.: D.C. Heath & Co., 1973), p. 52.

[8]*But see*, Dougharty, *op. cit.*, p. 28-36, in which the author concludes that the current property tax system actually operates to discourage leap-frog development.

[9]Hagman argues that this effect of the site-value tax would make historic preservation by the private market much less feasible by encouraging building owners to renovate or demolish their premises in order to make them more efficient and profitable. Hagman, *op. cit.* p. 777.

[10]In Los Angeles, 65% of the land is vacant, in Dallas, 41%; and in Greensboro, 45%. Charles Liner, "Alternative Tax Programs and Land Use Policy", *Proceedings — Second Annual N.C. Land Use Congress* (December 1972). *But see* Hagman, *op. cit.* p. 765: Hagman estimates the normal figure to be 15-20%.

[11]See Arthur P. Becker, "Arguments for Changing the Real Estate Tax to a Land Value Tax", *Tax Policy*, Vol. XXXVII, Sept.-Dec. 1970. p. 16.

[12]See Hagman, *op. cit.*, p. 776.

[13]Dick Netzer, Economics of the Property Tax, (Washington D.C.: The Brookings Institute), 1966, p. 33.

[14]*Ibid.* m o, 36.

[15]For example, between 1956 and 1966 land values rose faster than the rate of inflation and three times faster than the consumer price index. See "Building the American City", Report of the National Commission on Urban Problems (Washington D.C.: House Document 91-34, 91st Congress, 1968). p. 385.

[16]Some of the limitations of this argument are presented in "Building the American City", *op. cit.*, p. 389.

[17]"The Impact of a Transition to Site-Value Taxation on Various Classes of Property in San Diego," *Land Economics*, Vol. 50, No. 2, May 1974, p. 181.

[18]The theoretical arguments which support this conclusion can be found in Shaaf, *op cit* p. 36 ff.