International Conference on
LOW INCOME HOUSING – TECHNOLOGY AND POLICY
Bangkok, Thailand
June 1977

LAND SPECULATION AND SITE VALUE TAXATION IN THE UNITED STATES

H. TIDEMAN
Dean
Henry George School of Social Science of Illinois
Chicago, Illinois
U.S.A.

ABSTRACT

The world over, speculatively high land prices are the bane of housing. Because urban land has a record of appreciation in value, landholders, loath to sell it at its value today, hold out for that greater price - its prospective value tomorrow (at which it does not pay to use it today) called speculative - which becomes the going price, blocking construction; a problem now magnified by the flight of the disadvantaged to cities and that inflation of currencies resulting from efforts of governments to be all things to all men.

The answer to urban land speculation is Site (urban land) Value Taxation, to make it unprofitable to hold sites vacant or poorly used. It does over a broad spectrum what subsidization of land procurement for lower-cost housing does only narrowly, without, like subsidization, exacerbating the problem for the future. Yet, though it is now two centuries since Quesnay, the original "oeconomist," first suggested land value taxation, and almost one since Henry George publicized it widely, it remains worldwide largely unrecognized.

What are the problems of its implementation? What can be learned from United States efforts at implementation?

SITE VALUE TAXATION IN THE UNITED STATES

Even after long encroachment on state power by the central government, there today remains in the United States a wide latitude for local action on local taxes. These typically include some variation of taxes on property. [1]

The ubiquitous local United States tax on real property, land and buildings together, was originally very largely a tax on land - for how many and how valuable were the buildings in the country in 1776? [2][3] But, with the passage of time and with the continuing construction of buildings which are forced upon the attention of tax appraisers by their current construction at current prices, it has become largely a tax on buildings. As such, instead of offering the encouragement to housing and other construction which is the nature of a tax on site values, it imposes the discouragement which is the nature of a tax on building values.[4] Yet it has potential for thoughtful reform into a tax in whole or in major part on land values, and recent efforts toward implementing Site Value Taxation in the United States have concentrated on this possibility. Since the Earth was created by God and the value of sites - the land surface of the Earth - results from the presence of our fellow-citizens and the expenditure of public money for the public services required for their accomodation, a tax on site values would seem to be a most appropriate method of financing these services. [5]

But this is an understatement. It applies well enough to the statics [6] of the case, but does not adequately call attention to the dynamics. [7] Life is process, and one must look to the practical consequences of tax policy.

The owner of an entirely median value urban building on a median value site is quite unaffected by Site Value Taxation. The tax on the value of his land rises, but the tax on the value of his building drops in the same amount. His total property tax is unchanged; the street in front is as well paved, the police and fire protection are as good, the garbage is collected on the same schedule, the classes in the public schools are open the same hours with the same teachers, and his land (being as useful to him or to anyone else as it was before) sells for the same amount for which it sold before. But those who have not yet put their land to relatively equally good use find it desirable either to remodel or to build to get the income with which to pay the higher tax, or to sell the land to someone else who will. [8] Such improvement is made even more attractive by the fact that buildings, when erected, will not be taxed. Site Value Taxation is a major impetus toward construction.

This assumes a gradual adoption. Imposed suddenly, such a program could temporarily lower land prices because of a temporary rush of sellers seeking to avoid the tax. In the long run, it has the opposite tendency, a tendency to raise land values under the same amount of local property taxation, by bringing about additional improvement and higher use. [9]

When, instead of using Site Value Taxation, we impose penalties - taxes - on human activities and improvements, we create distortions which place urban man at a disadvantage as the construction of housing and other buildings wanes, production falters, wages drop, unemployment rises, and idle men make mischief. The rich are mistaken to think that they do not share in these disadvantages. As this suggests, there are many side effects of Site Value Taxation, necessarily beyond the scope of this study. [10] [11]

Let us look at some selected examples of United States implementation:

THE WRIGHT ACT CALIFORNIA IRRIGATION DISTRICTS

One of the earliest deliberate applications of Land Value Taxation in the United States was in the California Irrigation Districts which were permitted by the Wright Act of 1887 as later amended in 1897 and 1909. "The act authorizes the formation and operation of an irrigation district in an area where a group of farmers find it possible and desirable to develop water through joint efforts. If after filing a petition with the County Supervisor a majority of registered voters approve the formation of the district, the district is a reality. The law further empowers the district to issue bonds, certified by the California Securities Commission, and to levy a tax on land within the district that can be served with water. A board of directors is elected by the voters to manage the affairs of the district, and the directors will employ consultants, experts and staff for the construction, maintenance and operation.

"The irrigation legislation first provided for the taxation of improvements as well as land for district purposes. In 1909 the statute was amended so as to limit the assessment ....to the land value only." [12]

This change in taxation was accompanied by a bitter verbal and legal struggle. The larger holders of title to land in the district saw that if all buildings and other improvements were exempted from the district tax, the tax levy on any parts of their vast tracts of unimproved, underutilized land which were so located that they could be served by irrigation water would go up, and that they would be compelled to improve and produce more to meet their tax bills, or to sell to others who were anxious to do so. They said that the measure was "anarchistic", "communistic" and amounted to confiscation of their property under the guise of law. But the supporters defended the tax all the way up to the United States Supreme Court, which ruled that it was constitutional. [13]

A statement issued by the directors of the Modesto (California) Chamber of Commerce said, "The Modesto Irrigation District was organized in 1887. It was soon found that the small farmer who had built his house and barn and set out trees on his land was paying an excess proportion of the taxes of the district. On the other hand, the large owners who made little or no improvements and refused to sell their land had their taxes reduced because of the increase in the total assessed value of the property resulting from the new improvements." [14]

As a result of the 1909 amendment permitting taxing land values only, "....many of the large ranches have been cut up and sold in small tracts. The new owners are cultivating these farms intensively. The population of both the country and the city have greatly increased. The new system of taxation in collecting all the tax from the value of the land has brought great prosperity.... In the Modesto Irrigation District the man who builds a house or barn will not have his irrigation tax increased. He will pay no more than his neighbor next door who allows weeds to grow on his land." [15]

"There can be no doubt that the discovery of the legal formula for these organizations (the irrigation districts) was of infinitely greater value to California than the discovery of gold a generation before.... They are an extraordinarily potent engine for the creation of wealth." [16]

SPECIAL ASSESSMENTS FOR LOCAL IMPROVEMENTS

One of the principles demonstrated in the California irrigation districts - that public improvements increase the value not of buildings but of land - has been widely accepted by United States cities in the paving of public streets and sidewalks and the underground water and sewer lines which typically accompany them, and sometimes for bridges, parks and flood protection. These are financed through special assessments on the holders of abutting and advantaged land, who pay a share of the cost apportioned not to the size or value of their buildings, but only to the estimated effect on the linear feet of land frontage to which they have title. Since such services typically raise land values by more than their cost, and do not affect building values, the process has been accepted as equitable to public and landholder alike. [17]

SOUTHFIELD, MICHIGAN

But perhaps the most striking if transitory example of Site Value Taxation in action is the experience of Southfield, a suburb of the city of Detroit in the state of Michigan. Like other United States cities, Southfield raises a major part of its public revenue from the property tax, a tax on both land and building values. Mayor James Clarkson came into office with the support of a home-owners group whose taxes he reduced by annual re-appraisal of land values so that sites carried more of the taxes. This was accomplished not by legislative action, but by hiring a tax assessor who would concentrate his efforts on 100% land value appraisal. [18]

The results were a classic demonstration of the result of suddenly shifting property taxation from building values to site values. Housing taxes dropped. Speculative land prices, reacting to higher site value taxation, dropped. Then, because of the conbination of lower site prices and proportionately lower taxes on buildings, construction - not only of housing but also of places of employment - zoomed; in 1972, for example, there was more building in suburban Southfield than in all of the city of Detroit put together. Then, last, site values turned and rose again, since the additional construction had raised the _real_ value of land. It more than recovered its losses, even while the higher tax on land values continued to exert a pressure toward the use of sites for building purposes; the more valuable the site, the greater the pressure. [19]

This is no system of robbing the rich to benefit the poor. Sites are more valuable than they were before; they are, at the same time, under financial pressure edging them toward use, as changes in the tax arithmetic make the use of sites more profitable. How else can the landholder get the advantage of the lower tax on improvements, except by building? How else can he be sure that the site value tax will not erode his investment in the land, except by building to get an income with which to pay the tax?

(Nor is this the measure endorsed at the Habitat Conference in Vancouver, which proposes that governments take from the landholder, _at the time of development_, any past rise in the value of land he holds. Such a measure - as was discovered when it was adopted in Britain - offers no encouragement to the use of land, being in effect a punitive measure penalizing the landholder _at the moment of construction, because of construction_. If he does not build, there is no penalty. This is not an encouragement to construction, it is a discouragement. The horse is yoked to the cart backward.) [20]

Mayor Clarkson has sinœe retired and his successor is letting this successful variation fade away by not emphasizing land appraisals. Yet it has been demonstrated that all - housed wage earners and siteholders alike - here benefitted from Site Value Taxation. Because other kinds of taxes - other things being equal - make an area less desirable as a place to live or produce, they tend to lower land values just as much as Site Value Taxation does. [21] Under Site Value Taxation, however, land is better used, employment rises, and more is produced, raising the standard of living for all and even raising real land values in the very process of putting sites to use. [22]

THE "PITTSBURGH" GRADED TAX PLAN

Yet the most famous and most solid example of the application of the principle of Site Value Taxation in the United States cities continues to be the "Pittsburgh" Graded Tax Plan. In 1913, a working combination of enlightened businessmen and reform politicians, in a period of reaction to a preceding corrupt Pittsburgh city administration, secured the passage of a state law modifying the local system of property taxation to - over a transition period of twelve years - raise the rate of property taxation on land values and lower the rate on building values in Pittsburgh and Scranton until the rate of taxation on land values is twice that on building values. [23]

Said the Russell Sage Foundation, "...for a generation Pittsburgh had been entangled with a taxation system which....made it easy for individuals and estates to hold great areas of undeveloped land, but which, on the other hand went gunning for the man who bought and improved a small tract, and levied at him what was in effect a double tax rate. The first was rewarded for doing nothing further than holding the land while the community grew and made it valuable, but the second was penalized for doing something which directly increased not only his own but all land values." [24]

Since the inception of the Pittsburgh Graded Tax Plan, the total assessed value of Pittsburgh land - even after the annexation of the adjoining eight square mile city of Allegheny - remains substantially unchanged, though tax revenues are materially higher. The assessed building value has almost quadrupled. [25] [26] This is true despite the fact that the Tax Plan applies only to city taxes, not to taxes for local public schools and the county, one of the larger areas into which the states are typically divided. [27]

To quote Percy Williams, a former Pittsburgh Assessor, "It would be an exaggeration to say that Pittsburgh has solved all its land problems, but the situation has greatly changed. Land monopoly has not been eliminated, but it is not now so conspicuous. Some of the largest estates, such as the

Schenley estate, have been terminated. Other estates, where formerly a building of palatial dimensions occupied a huge tract of land, have been taken over by developers who have erected apartments or groups of smaller dwellings."[28]

"...the much higher land taxes now imposed have been a very real influence in checking land speculation and monopoly and in expediting the improvement of real estate. It is no longer profitable, with the present tax levy on land, to hold valuable land out of use for any considerable length of time." [29]

Remodelled housing in Pittsburgh is also exempted from property taxation for three years; but with, necessarily, a proportionate increase in the taxes on other buildings and all sites.[30] Legislation is under consideration to similarly exempt new housing.[31] These exemptions apply only to buildings, not to land. It is to be noted that a blanket exemption of buildings without an increase in the site tax merely raises land values. Sites on which one can build without an increase in taxes are naturally more valuable, and land values absorb that advantage.[32]

OTHER PENNSYLVANIA LOCAL GOVERNMENT UNITS

In 1951, the Pennsylvania legislature passed legislation - later amended in 1959 - permitting any of the fifty or so "cities of the third class" also to adopt Graded Taxation with an emphasis on the taxation of land values, by action of the local city council. In 1973, the City Council of Harrisburg, the state capital of Pennsylvania, voted to adopt Graded Taxation, emphasizing Site Value Taxation in the ratio of 1:44 to 1.[33] The principal argument offered for the step was that more tax income could be raised without increasing the tax on and so discouraging the rehabilitation and new construction of housing and other buildings. The change was relatively minor, and few people knew about - let alone endorsed or opposed - the change.

In this connection, the analyst must realize that there is no magic in Graded Taxation. Granted, the holders of vacant sites who feel the pressure of higher taxation here will have an inducement to improve or to sell. But not until the public as a whole realizes that the system also minimizes the rise in taxes resulting from the construction or rehabilitation of housing or other buildings, can the full effect of this change in taxation be reflected in the behavior of potential builders here.

The City Council of the City of Clairton, Pennsylvania, in 1976 requested the Assessment Board of Allegheny County to provide the City with a separate valuation of land and improvements for all taxable real estate, to permit a study of the probable effects of a higher tax rate on sites and a smaller rate on improvements.[34] Several other Pennsylvania cities have also looked into the advantages of Graded Taxation. Supporters expect that the tendency of new building projects to be attracted to areas where higher taxes on sites reduce speculative land vales and where construction is less highly taxed,[35][36] will create continuing pressure for the extension of the system into additional areas.

Since the total of county, school district and township taxes in Pennsylvania approaches the total of the city tax levy in areas like Pittsburgh, the State Department of Community Affairs is currently sponsoring enabling legislation to permit the adoption of Graded Taxation by these other local government units as well.[37]

CHICAGO, ILLINOIS

A new 1971 Illinois State Constitution adopted with the support of advocates of Site Value Taxation now permits graded property taxation in Chicago up to a differentiation of 2½ to 1. This power could be used to introduce a measure of Site Value Taxation by lowering the tax on building values and raising the tax on land values. But the existing political power structure continues to ignore the fact that land and buildings have a different provenance and so react differently to taxation, and the administration instead maintains lowered taxes on housing (land and buildings together) and proportionately higher taxes on commerce and industry (land and buildings together).[38] Naturally, the flight of stores and industry to the suburbs is accelerated, leaving many poor, expecially the poorer and younger male blacks,stranded and jobless in the city, a major disaster to them personally and a standing threat to urban tranquility.[39] This is regrettable because Site Value Taxation would encourage the construction of both housing <u>and</u> industry. The poor, with employment, could then pay for their own housing.

The lack of support for Site Value Taxation among the major Chicago builders results in part from the fact that they personally already have access to some of its advantages. They are the selected beneficiaries of a system by which the Tax Assessor at his option rebates the amount added to the existing original taxes on land values by the construction of large developments, to the extent necessary to permit the developer to make at least 12% per year on his "equity", his personal investment. Under the circumstances, the inner circle of developers find it hard to be concerned about the welfare of their fellow citizens.[40]

If the advantages of Site Value Taxation were incorporated into public policy not by secretly awarding building tax exemption to favored individuals through this so-called "Certificate of Error" method, but by incorporating them into the graded taxation which affects everyone across the board, the effect would be proportionately larger and the benefits would accrue not merely to the privileged, but to all.[41]

FAIRHOPE, ALABAMA

There also exist in the United States voluntary Land Value Taxation associations. One of the best known is Fairhope, Alabama. Its 1894 founders jointly bought the land on which they established themselves, and annually redistribute the property taxes on the area controlled by the corporation on a basis of collecting income for local government expenses against only land values.[42] This limits the dscouragement to construction imposed by taxes on buildings, and provides a control of land speculation. But it is not conducive to the expansion of the system into surrounding land held by others at speculative prices created in large part by the presence of the settlers themselves. The method has a built-in dead end.

This became apparent early in the experiment. The founders, men of modest means, first established themselves on 135 acres which they bought at $6 an acre.[43] By 1907, when the corporation expanded by adding another 2200 acres, surrounding land had risen to about $20 an acre.[44] Expansion of the current 3390 acres would have to be on land priced at hundreds and thousands of dollars an acre.

THE DISTRICT OF COLUMBIA

One of the most informative efforts to implement Site Value Taxation is now going on in the District of Columbia, the site of the capital city of Washington. Federal Public Law 93-407, enacted in 1974, permits the City Council to adopt a system of "establishing different tax rates for land and for improvements thereon."

Says Tedson J. Meyers, a former Council member who helped initiate the incentive feature of the law, "We watched tremendous commercial and apartment construction in Crystal City in Arlington across the river from us and wondered why we didn't have this in the District. We became curious about the economics of development. Studies and testimony by expert witnesses suggest that site value taxation is one of the ways to spur downtown development and make residential development more attractive. The issue needs to be more widely discussed and understood."[45]

John B. Rackham, Senior Realty Tax Specialist of the United States Postal Service and former District of Columbia Assessment Standards Specialist, speaking at a Washington seminar, described the changes if District housing and other buildings were exempted from the property tax, leaving a tax on site values only:

1. Virtually all residential property would enjoy reduced tax liability.
2. Lower cost housing would receive especially large tax reductions.
3. The apartment industry would be revitalized.
4. The District would have a marked competitive advantage over surrounding suburbs for attracting office buildings (in which there would be jobs).
5. Redevelopment would be spurred in near-in "hardship areas" and the "riot corridor," (the area in which widespread racial riots snd property destruction took place at the time of the assassination of Rev. Martin Luther King, Jr.)
6. Unhealthy land speculation would be discouraged.
7. The use of land merely for surface automobile parking as a commercial venture would be discouraged.[46]

This analysis is based on a computer simulation study of taxation on different uses of property in the District. Assuming that the same revenue is raised from taxing land values alone that is now raised from taxing both sites and buildings, the study shows how different classes of property would on the average be affected. In general, the taxes on residential facilities would go down, the taxes on other uses would rise. The figures, as given by Mr. Rackham, show:

30,000 single-family homes, taxes down 18%
42,000 row dwellings, taxes down 14%
24,000 semi-detached dwellings, taxes down 21%
572 elevator apartments, taxes down 23%
8,000 flats, taxes down 31%
4,000 walk-up apartments, taxes down 39%

On the other side of the ledger are:

Hotels, taxes up 8%

Warehouses, taxes up 19%

Small office buildings, taxes up 41%

Commercial garages, taxes up 58%

Gasoline filling stations, taxes up 58%

Vacant lots, taxes up 134% [47]

These are first year effects. All property owners, whether their taxes increase or decrease, could benefit by remodelling or building on their land to take advantage of the fact that buildings would not be taxed in future years.

A further analysis by Dr. Margaret Reuss, Chairman of the Economics Department of Washington's Federal City College, shows that residents of the six District neighborhoods with the highest median family incomes- over $20,000 - would on the average feel a tax increase of 12% under Site Value Taxation. The effect on residents of neighborhoods with median family incomes between $20,000 and $10,000 would be relatively neutral. But property taxes in the neighborhoods with median family incomes below $10,000 would drop 39%. That is to say, Site Value Taxation would raise the property taxes of those who can best afford to pay them, and reduce the property taxes falling on property occupied by the poor.[48]

Dr. Reuss suggests that site value taxation be achieved in a decade by each year gradually raising the proportion of the property tax falling on land values and decreasing the proportion falling on building values. Landholders facing higher taxes would not find the annual changes a "brutal shift" and would have an adjustment period in which they would have time to arrange to make more profitable use of their sites.[49]

As the non-parallel experiences of Pittsburgh and Southfield suggest, the gradual adoption of Site Value Taxation over years, by giving time for development as the change is made, could avoid a yo-yo effect in land prices as they first went down as a result of the increased taxation of land values and then rose again as a result of the increased general development resulting from higher taxes on land values and lower taxes on building values.

Removing the tax from buildings would be a strong incentive to residential rehabilitation and other development, Dr. Reuss says, increasing employment and income flow in the District.[50]

Statistical studies of the kind made for the District of Columbia can be meaningful only because of the high standards maintained by the Tax Appraisers of the District. Making careful distinctions between land values and building values is a process requiring professional skill and care, typically with the use of cadastral maps and something like the so-called Somers System.

An attempt to make similar studies for the deteriorating city of Buffalo in New York State disclosed the fact that the local property tax appraisers had first determined the total value of each real estate holding and had then arbitrarily called a fixed small fraction of it land value and the rest building value. Under these circumstances, to spend further time and energy on analysis was obviously meaningless and the study had to be postponed.

NEW YORK CITY

Shortly before the Pittsburgh Graded Tax Plan was adopted, a proposed bill in the New York State legislature providing for a city referendum on gradually transferring taxes from New York City building values to site values was "...fought tooth and nail by the real estate interests which specialized in land speculation, and almost equally hard by the loaning interests.... Outstanding opponents of the measure included...(the) President of the New York Real Estate Board... (The) Comptroller of the Metropolitan Life Insurance Company was leader and organizer of the opposition by the lending interests." It was ultimately bottled up in a legislative committee and never came to a vote. [51]

Even in today's tax- and job-starved New York City, from which new privately built housing of any kind has virtually disappeared, the mention of Land Value Taxation by a deputy mayor in a New York Times interview [52] was followed by his peremptory discharge. Yet a shift to Site Value Taxation could increase the city's tax income not only without discouraging housing and other construction, but actually encouraging it.

Granted, as Prof. C. Lowell Harriss of Columbia University says in passing in his excellent distillation of principles of site value taxation in The Cities of Asia [53] "Land price increases in and around cities have made rich men out of owners of farm land, vegetable plots, and waste areas. More than one owner of a few acres of rice land near Tokyo or Bangkok or Taipei have reaped handsome gains because of the pressure of population. In America, North and South, and in Europe and Australia and Africa, private enrichment has come to the passive owner of land who has done little to enlarge its worth as part of the city whose growth has brought his good fortune. In fact, he may have paid no more than an infinitesimal fraction of the taxes which have paid for the streets and other governmental facilities which have helped to elevate the value of his land."[54]

But this paper is not addressed to the question of whether the urban site-holder reaps where he has not sown; the problem to which it addresses itself is that all too often he not only will not himself reap, he also will not - except at prohibitive prices - permit others to do so either. The implementation of Site Value Taxation, in the United States as elsewhere, takes away his opportunity to play dog-in-the-manger with that portion of God's Earth, the common inheritance of mankind, with which he has been entrusted.

REFERENCES

1. U.S. Bureau of the Census, Census of Governments, Vol. 6, No. 4, U.S. Government Printing Office, Washington, D.C., 1964, p.44, table 6.
2. Becker, A.P., "Principles of Taxing Land and Buildings for Economic Development," in Land and Building Taxes: Their Effect on Economic Development, A.P. Becker, ed., Univ. of Wisconsin, Madison, Milwaukee and London, 1969, p.14.
3. Lynn, A.D., Jr., "Property Tax Development - Selected Historical Perspectives," in Property Taxation USA, R.W. Lindholm, ed., Univ. of Wisconsin, Madison, Milwaukee and London, 1969, p. 17.
4. Becker, A.P., ibid, p. 45.
5. Becker, A.P., ibid, p. 16.
6. Samuelson, P.A., Economics, McGraw-Hill, New York City, 8th ed., 1970, pp. 540-541, as example.
7. Becker, A.P., ibid, pp. 11-47.
8. Popp, D.O. & Sebold, F.D., "Redistribution of Tax Labilities Under Site Value Taxation," The American Journal of Economics and Sociology, Vol. 31, No. 4, 1972, pp. 413-416.
9. Becker, A.P., ibid, p. 30.
10. Gaffney, M., in Property Taxation, Housing and Urban Growth, the proceedings of a symposium co-sponsored by the U.S. Dept. of Housing and Urban Development at the Urban Institute, Washington, D.C., 1970, pp. 11-13.
11. Becker, A.P., "Arguments for Changing the Real Estate Tax to a Land Value Tax," Tax Policy, Vol. XXXVII, No. 9-12, 1970, reprinted by the Robert

Schalkenbach Fndn., 50 E. 69th St. N.Y., a good short non-technical presentation of the subject.

12. Teilmann, H., "The Role of Irrigation Districts in California's Water Development," The American Journal of Economics and Sociology, Vol. 22, No. 3, 1963, pp. 411-412.
13. Teilmann, H., ibid, p. 412.
14. Teilmann, H., ibid, pp. 412-413.
15. Teilmann, H., ibid, p. 413.
16. Henley, A.T., "The Evolution of Forms of Water Users Organizations in California," California Law Review, Vol. 45, 1957, pp. 665-667.
17. Encyclopedia Americana, Vol. 2, 1973, p.527.
18. Gwartney, T., in Property Taxation, Housing and Urban Growth, the proceedings of a symposium co-sponsored by the U.S. Dept. of Housing and Urban Development at The Urban Institute, Washington, D.C., 1970, p.48.
19. Gwartney, T., "The Southfield Story: A Lesson in Creative Taxation," no publisher, n.d., pp. 1-7. Mr Gwartney is now Assessor of Vancouver, Canada; also interview with Mr. Clarkson in May, 1973.
20. Saldji, V.G., "The Land Commission's Betterment Levy," paper presented at Twelfth International Conference on Land-Value Taxation and Free Trade at Caswell Bay, Wales, 1968, Cambrian Press, Wrexham, Denbighshire, England.
21. Gaffney, M., "Adequacy of Land As A Tax Base," in The Assessment of Land Value, D.M. Holland, ed., Univ. of Wisconsin, Madison, Milwaukee & London, 1970, p. 188.
22. Gaffney, M., "Adequacy of Land As A Tax Base," p. 198.
23. Williams, P.R., The Pittsburgh Graded Tax Plan, reprinted from 1962 & 1963 issues of The American Journal of Economics and Sociology, Robert Schalkenbach Fndn., N.Y. City, n.d., pp. 1-65.
24. Harrison, S.M., Civic Frontage: The Pittsburgh Survey, The Russell Sage Fndn., N.Y. City, 1910, pp. 156-213, 455-468.
25. Williams, P.R., ibid, p. 67.
26. Williams, P.R. ed., "How Land Value Taxes Have Advanced in Pittsburgh," Equal Rights, Vol. VII, No. 3, p. 4.
27. Williams, P.R., The Pittsburgh Graded Tax Plan, p. 53.
28. Williams, P.R., The Pittsburgh Graded Tax Plan, p. 62
29. Williams, P.R., The Pittsburgh Graded Tax Plan, p. 64.

30. Mayers, S.A., ed., "Pittsburgh At It Again," Henry George News, Vol. 38, No. 1, 1974, p. 1.

31, Mayers, S.A., ibid, p. 1

32, Gaffney, M., in "Adequacy of Land As A Tax Base," pp. 190-193.

33. Mayers, S.A., ed., "Graded Tax Law Adopted,"Henry George News, Vol. 38, No. 2, 1974, p. 4.

34. Williams, P.R., ed., "Clairton Planning for Graded Tax," Equal Rights, Vol. VI, No. 1, 1975, p. 1.

35. Grey, A.L., Jr., "Urban Renewal and Land Value Taxation," in Land and Building Taxes: Their Effect on Economic Development, A.P. Becker, ed., Univ. of Wisconsin, Madison, Milwaukee & London, 1969, ll. 81-96.

36. Alyea, P.E., "Property Tax Inducements to Attract Industry," in Property Taxation USA, R.W. Lindholm, ed., Univ. of Wisconsin, Madison, Milwaukee & London, 1969, pp. 139-158.

37. Williams, P.R., ed., "Georgists Campaigning for Legislation," Equal Rights, Vol.VII, No. 2, 1976, p. 1.

38. Kissell, R.J., "Report on Assessment Practices in Cook County," Illinois Department of Local Government Affairs, 1972, p. 72.

39. Tideman, H., "Chicago Low-Cost Housing in Relation to Industry," Proceedings, Third International Symposium on Lower-Cost Housing Problems, Montreal, O. Ural, ed., Inter. Assn. for Housing Science, 1974, pp. 412-427.

40. Tideman, H., "A System of Land and Building Taxation for Urban Housing," Proceedings of International Conference on Urban Housing, V. Kouskoulas, ed., Civil Engg. Dept., Wayne State Univ., Detroit, 1973, pp. 106-112.

41. Tideman, H., in "A System of Land and Building Taxation," pp. 109-110.

42. Alyea, P.E. & B.R., Fairhope, 1894-1954, Univ. of Alabama, 1956, pp. 13-14

43. Alyea, P.E. & B.R., ibid, p. 31.

44. Arnold, C., "Fairhope" at Henry George Conference at Kendall College, Evanston, Illinois, 1976.

45. Meyers, T.J., at seminar sponsored by League for Urban Land Conservation, Landmarks, Washington, D.C., Vol. 1, No. 1, 1975, p. 2.

46. Rackham, J.B., at seminar sponsored by League for Urban Land Conservation, Landmarks, Washington, D.C., Vol.1, No. 1, 1975, p. 2.

47. Rackham, J.B., ibid, p. 1.

48. Reuss, M., at seminar sponsored by the League for Urban Land Conservation,

Landmarks, Washington, D.C., Vol. 1, No. 1, 1975 p. 2

49. Reuss, M., ibid.
50. Reuss, M., ibid.
51. Marsh, B.C., Lobbyist for the People, Public Affairs Press, Washington, D.C., 1953, pp. 20-22.
52. New York Times, May 13, 1973, p. 1 and p. 7.
53. Harriss, C.L., "Local Responsibility and Land Taxation: Lessons from the United States Experience," in The Cities of Asia: A Study of Urban Solutions and Urban Finance, John Wong, ed., Singapore Univ. Press, 1976 pp. 412-430. No examples.
54. Harriss, C.L., ibid, p. 415.