
Effects of Green Taxation on Housing Rents

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The Case for Capturing Land Value Increases

Implementing the City of Seattle's Urban Centers and Village policy will require substantial public investments in new infrastructure and amenities, and sizable increases in neighborhood program funding. These public sector commitments, in the form of land use plans, regulations, and capital, will stimulate private sector investments in business activity and housing. This economic activity will result in the growth of "location rents", or rising land values in designated central locations. Such value increases are experienced generally, that is, on all parcels in the vicinity of urban centers and villages—independent of capital investments in building improvements that individual owners may undertake. In the course of real estate transactions, owners and purchasers make judgements based upon their expectations of local government behavior. Thus, government actions coincidentally "give" property added value.

This additional value, reflected in land value assessments, can either be retained by individual owners as a capitalized asset, or captured by the public sector to be applied to public benefits. A basic principle in liberal economic theory holds that legitimately created value belongs to the creator of that value. Hence, government is justified in recapturing what it has given. In practical terms, the City of Seattle has two options that require no losses of revenue: (1) It may require property developers in urban centers to commit a portion of new development towards serving a public purpose, such as common amenities or affordable housing units. (2) It may recapture incremental land value increases through the general property tax (or through other forms of value capture for specific development projects).

Principles and Methods of Tax Reform

"Green tax" advocacy is an integral part of the environmental movement, which seeks to alter the system of financial incentives that would result in reduced levels of environmental pollution, greater protection of natural resources, and more efficient land use. In economic terms, a reform of the state and local tax system would entail a shift in tax burden off of two factors of production, labor and capital, and onto the third factor: land or resources. In the words of Alan Durning of Northwest Environmental Watch, "taxing the gifts of nature (or more precisely, taxing actions that degrade the gifts of nature) tells people to conserve these gifts." (Tax Shift, NEW Report No. 7, April 1998).

Furthermore, it is argued that the current tax system in Washington State causes a loss of economic output, due to distorted incentives. In these terms, corporate income taxes, sales taxes, and property taxes (on improvements) are regressive. Rather than taxing the consumption of resources, they tend to tax the consumption of goods produced by labor and capital investment.

First, the present property tax system of taxing land and improvements at the same rate encourages unwise land use practices. Imposing heavier taxes upon substantially improved properties than upon vacant and underutilized sites amounts to an inducement to speculate on land. When the values of surrounding land that is becoming more intensely developed begin to rise, the present owners of marginally used land have no financial incentive to likewise develop their properties. Rather, they will often find it more profitable to let their sites remain idle until rising lot prices in the neighborhood offer the prospect of high windfalls upon resale. Secondly, the taxes on sales of building materials to developers, as well as the business and occupation tax, amount to an additional cost burden eventually borne by the occupants of newly constructed offices, retail establishments, and homes.

There are two tax shift options that are potentially available to help bring down the costs of new construction projects. First is the reduction of tax rates that apply to sales and business transactions. Taxes on commerce could be reduced by increasing the tax rates on pollution, energy consumption, resource consumption, and traffic (congestion pricing). Currently, in the Northwest Region, business, income and sales taxes account for 48% of total revenues. Under a green tax scenario proposed by NEW, these revenues could be reduced to 16% by offsetting the difference with revenues from resource-based taxes.

The second option, also requiring state legislative action, is to reform the present property tax system by taxing assessed land values at a higher rate than improvement values. As a result of placing a proportionately higher tax rate on land values, it would become more costly to hold onto vacant or underutilized central (urban center) sites. Coincidental with the reformed tax system would be a gradual trend towards infill development, as owners realize the tax benefits of making substantial capital investments in improvements. The marginal tax increase on sites having a high ratio of land-to-building value would also be capitalized into lower resale prices. Because a land value tax is applied to all properties within a taxing jurisdiction, the general effect would be a restraint on rising land prices.

Theoretically, a land value tax (LVT) could tax land values exclusively, eliminating the tax on improvement values. However, a split rate method is more practicable. Phasing-in the 2-rate tax by incrementally expanding the differential rate would minimize economic dislocation resulting from an abrupt change in tax billing. Beginning with a move to 55% of the tax rate on land assessments, the rate differential might ultimately reach a ratio of 95% on land and 5% on improvements (a 95% LVT).

Static Effects on a Hypothetical Rental Project

To model the green tax scheme, a hypothetical quarter block site in Denny Triangle is selected. It has the typical characteristics of a potentially redevelopable parcel classified in the zoning code as DMC-240. Density standards in this zone would allow a maximum equivalent of 111 dwelling units on this site, estimated to have a unit land price of \$90 per square foot. Results of the simulation are shown in Table 1.

Property taxes on this example site are calculated from the estimated total project cost derived from a simulated development proforma. The assessment ratio is based on the average land-to-total value ratio (.27) of all fully developed residential/mixed-use parcels in Denny Triangle. This method apportions \$5.4 million to land value and the \$14.8 million residual to building value. The 1998 combined tax rate for properties in Seattle is \$12.142 per thousand of assessed value, yielding a conventional tax on the completed example project of \$255,011. The average supportable market rent in this project would amount to \$1,910, assuming that a 10% return on investor's cost is required.

A hypothetical 95% LVT, whereby 95 percent of the tax rate is applied to land assessments, requires a land tax mill rate of \$27.2 and an improvement tax rate of \$1.43 in order to achieve revenue neutrality within the Seattle school district. That is, the district-wide annual revenue produced from the conventional single rate system and the 2-rate system is the same, \$518 million. Every property within this taxing jurisdiction is subject to the same differential rate. The low land-to-total assessment ratio on this new high-density development has the effect of reducing the impact of the high land tax rate. A 2-rate tax on this property would be \$169,222. Under the same cost/return assumptions, the average market rent would now amount to \$1,790, a 3.19 percent decrease from the conventionally taxed property.

The 2-rate tax is lower than the conventional tax because the land-to-total (LTV) assessment ratio of .269 is considerably lower than the city-wide ratio of .416; that is, the building portion of this project accounts for 73% of the total assessment and is taxed at a lower rate than the land assessment. (In time, during the "mature market" phase of redevelopment in the Denny Triangle, land assessments will likely increase, raising the LTV ratio somewhat.) Had the same site remained undeveloped, the 2-rate tax would have produced the opposite effect. The representative site consists of a marginal building valued at \$36,994 on a lot valued at \$887,782, producing an LTV ratio of .96. The conventional tax on this underutilized site is \$11,229; a 2-rate tax would be \$24,198, resulting in an upward tax burden shift of 115 percent. These

simulations illustrate the power of the land-based tax system to (i) stimulate the redevelopment of infill sites rather than to keep them in their present underutilized condition, and (ii) reduce holding costs through lower tax rates, thus lower market rents.

The sales tax and the business and occupation tax, having a combined estimated rate of 8.2%, coincide with the construction phase in the model simulation. If the state were to institute the recommended application of a comprehensive system of green taxes, sales and business tax revenue could be reduced by two thirds (see Durning, TAX SHIFT). This requires a combined tax rate of only 2.73% on construction hard costs. Average market rent under the present tax system is \$1,910; under the lower green tax rate scenario, market rents could be effectively lowered by 3.19% to an average of \$1,849.

Combining the two green tax adjustments, which affect construction costs and annual property taxes, an average rent reduction of 6.28% could be realized (in the first year). See the following table.

Table 1

RESIDENTIAL PROJECT SIMULATION RESULTS:

GREEN TAX ADJUSTMENTS

SITE PARAMETERS		RENTAL PROJECT	
Neighborhood		Denny Triangle	
Block		Representative quarter bl.	
Zoning		DMC-240	
Site area		13,863	sq.ft.
Site - unit market value	\$	90	per sq.ft.
OUTPUT PARAMETERS			
No. units		111	units
Est. bldg. height		9	stories
Total project cost	\$	19,093,043	

CONVENTIONAL PROPERTY TAX

Assessed land value	\$	5,649,631
Assessed building value	\$	15,352,716
LTV ratio		0.069
Property tax	\$	255,011
Market rent	\$	1,910 per unit
Rent reduction		

2-RATE PROPERTY TAX

95% Land Value Tax	
\$	169,222
\$	1,849
\$	61 3.19%

SALES AND B&O TAXES

Total hard costs	\$	9,996,990
Total sales and B&O tax	\$	819,753
Market rent	\$	1,910 per unit
Rent reduction		

REDUCED BUSINESS TAXES

66% reduction	
\$	273,251
\$	1,849
\$	61 3.19%

COMBINED CONVENTIONAL TAXES

Total sales and B&O tax	\$	819,753
Property tax	\$	255,011
Market rent	\$	1,910 per unit
Rent reduction		

COMBINED GREEN TAXES

\$	273,251
\$	167,222
\$	1,790
\$	120 6.28%

Comparing the Land Value Tax with Tax Abatement Programs

The City of Seattle has adopted a tax incentive program to encourage the development of affordable housing in targeted neighborhoods, authorized by state law (RCW 84.14). Under the Multifamily Tax

Exemption Program, the improvement portion of the total property tax billing is exempted for up to ten years on building projects of four or more units. Within the downtown urban center, International District and Pioneer Square were selected for a pilot test of this program. (The program has since been expanded to include Denny Triangle.)

One problem with any tax abatement scheme is that its application results in either a net revenue loss to the taxing jurisdiction or a tax shift onto all other taxable properties. An alternative to abatement is the land value tax system that shifts tax burden in accordance with desired affects on land utilization. The two-rate system would tax vacant and underutilized sites more heavily and fully developed sites less.

A simulated tax application on a hypothetical vacant site in the International District shows the static effects of both approaches: On a typical quarter block site zoned IDM-75-85, the full conventional tax on a newly constructed 77-unit apartment building is \$143,092. Under the City's exemption program the tax on the land assessment would amount to \$32,053. The average market rent could be reduced by 7.8%, still yielding a 10% developer's return on cost. But the tax revenue loss of \$111,039 from this project would have to be absorbed by all other taxpayers.

Consider the potential fiscal impacts of this program on the City of Seattle: As of 1998, downtown neighborhoods would have to add about 12,250 housing units to meet Comprehensive Plan production goals. The average per-unit tax revenue loss in the three program eligible neighborhoods is estimated at about \$1,500 per year. If all projected residential development in the eligible neighborhoods were to take advantage of the tax abatement, the present value of the 10-year total would amount to about \$130 million. Even if 10% of the projected units were tax abated, the revenue loss or tax displacement would come to nearly \$13 million in the downtown urban center alone.

As an alternative, a 2-rate tax (95% LVT) on the typical ID site would yield \$84,885, effectively reducing the average rent by 4.1 percent. (On the previously illustrated Denny Triangle site, the average rent reduction is 6.28%, compared to 7.54% resulting from the tax exemption.) The effect on rent reduction is moderately less than the abatement scheme, but there would be no revenue loss or indiscriminate shift of tax burden. The tax difference would now be shifted primarily onto vacant and underutilized sites. The long-term effect of a land tax applied uniformly to the entire market area would be a downward pressure on land price inflation. This effect alone is advantageous to renters, and combined with property tax reductions on new high-density projects could produce significant improvements in affordability.

* This working paper is adapted from the Technical Housing Report to the Downtown Urban Center Planning Group, Section 7: Housing Strategies - Tax Incentives, September, 1998.