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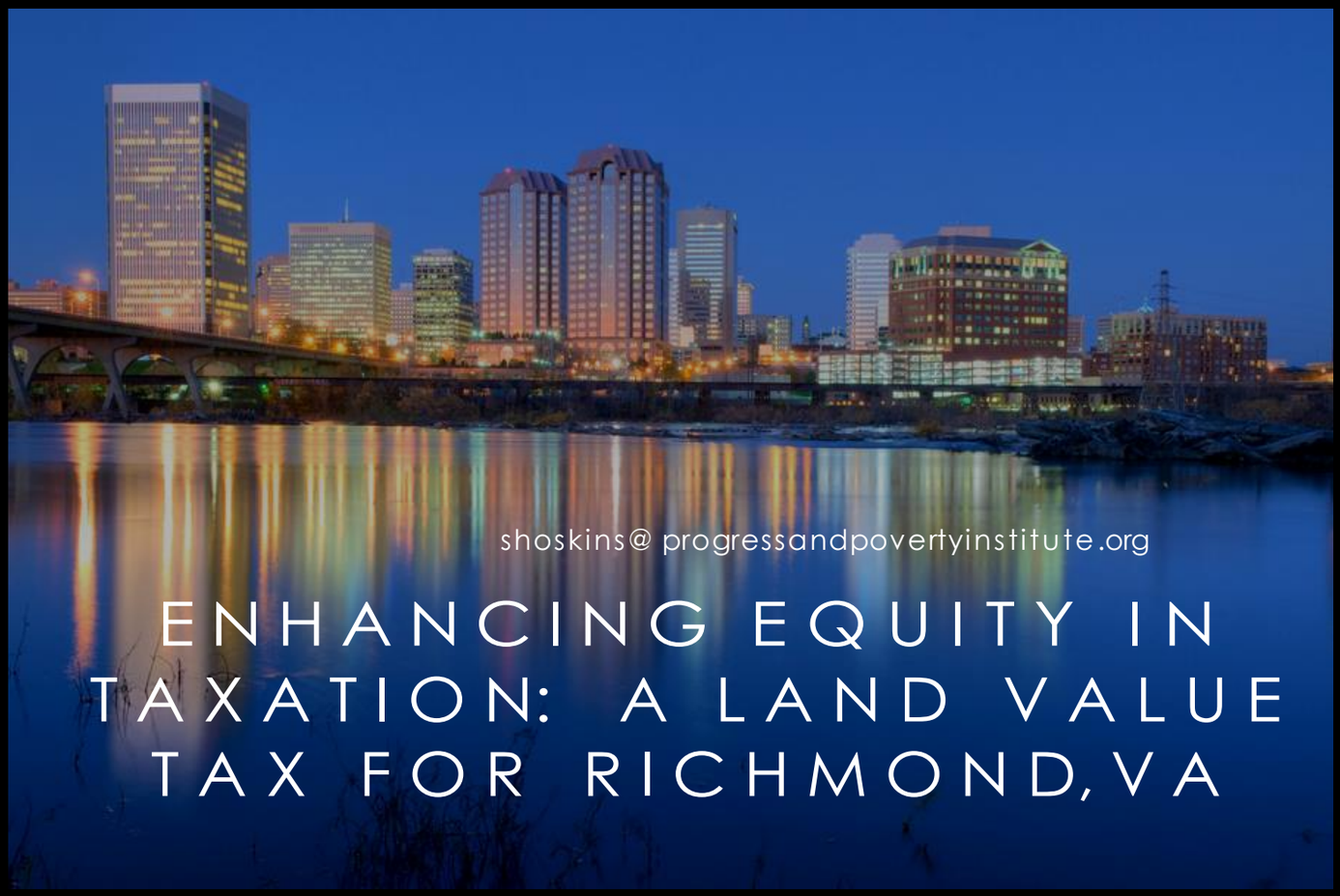

shoskins@ progressandpovertyinstitute.org

ENHANCING EQUITY IN TAXATION: A LAND VALUE TAX FOR RICHMOND, VA

Prepared By:

Stephen Hoskins &
Josie Faass, Ph.D.

Progress and Poverty Institute

407 Nassau Street
Princeton, NJ 08540

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Abstract

This report analyzes the impact on property tax bills if Richmond, VA were to implement a revenue-neutral switch to a split-rate property tax system, cutting the tax rate on improvements and increasing the rate on land values. As expected, adoption of a Land Value Tax (LVT) will increase tax bills on low-intensity land uses, including vacant land, surface parking lots, and industrial uses. Half of single-family dwellings will enjoy a tax increase under an LVT, while half get a tax cut. The proposed shift is broadly progressive, tending to reduce the tax burden on property owners in neighborhoods which are lower-income, or which have a higher proportion of Black residents, including the Southside, where 73% of single-family homeowners will see their tax bills go down upon adoption of the policy. Overall, adoption of an LVT is expected to interact favorably with the goals of the Richmond 300 masterplan, primarily by lowering the tax burden on multifamily housing, increasing the financial rewards for developers who make these much-needed investments in the city's housing stock. Finally, putting an LVT in place *prior to* engaging in the significant rezoning also articulated in the plan will position Richmond well to capture the significant value this change will create, making it available to support much-needed infrastructural and other public investments. Subsequent research could investigate aspects of optimal transition and policy design or could study the likely impacts of an LVT shift on outcomes such as housing supply, business formation and property values.

Introduction

Richmond, VA is currently enjoying an economic and population boom as households relocate away from unaffordable housing markets in NoVa, Baltimore & D.C. In response, the City has adopted a citywide masterplan for inclusive growth: "Richmond 300: A Guide for Growth", which includes the goal of expanding housing opportunities among its "Big Moves". The Progress and Poverty Institute (PPI) was retained by the City of Richmond to explore the on-the-ground impacts of implementing a Land Value Tax (LVT), a growth-friendly policy proposal that could help the city realize the ambitious goals set forth in the Richmond 300 masterplan. Adoption of an LVT would split Richmond's (current) single property tax rate in two, raising the tax rate charged to land, while cutting taxes on homes, buildings and other improvements.[1]

Any proposed change to the structure of property taxes in Richmond will be met with the question "*who will pay less in property taxes and who will pay more?*" The research presented herein answers that question, using current tax data to analyze three rate scenarios. Impacts are then presented and discussed citywide, and at the level of individual neighborhoods. Census data are also incorporated into the analysis to understand the proposed policy's anticipated fiscal impacts on different demographic populations within Richmond. This report begins with a brief literature review of the impact of land value taxes, especially among the roughly 20 Pennsylvania school districts and municipalities that have utilized this policy tool. Next, data and analytical methods are explained, followed by a detailed discussion of results, and associated conclusions and recommended next steps.

Literature Review: What is a land value tax? What are its benefits? A traditional property tax applies a single

[1] Senate Bill 725, passed in 2020 gave Richmond (along with Fairfax, Poquoson, and Roanoke) the right to tax land & buildings at different rates.

tax rate to the combined value of land and buildings on each property within a taxing jurisdiction to determine the owner's annual bill. Such an approach is currently used by the City of Richmond, which charged $1.20 per $100 of property value in 2023.

A Land Value Tax (LVT) is distinguished from this type of single rate approach by three key features: an LVT *reduces* the tax rate on buildings, which is offset by *raising* the tax rate on land, so that the combined effect is a *revenue-neutral* tax shift. Crucially, LVT allows jurisdictions like Richmond to discourage zero-sum speculation on vacant & underutilized land, instead rewarding investment in productive homes & businesses, all while still maintaining budgets for municipal services. Economists have long been strongly supportive of LVT shifts, and real world evidence supports the policy's utility. This is, in large part, because land is immobile and can therefore be taxed without harming production or investment. Empirical studies of the approximately 20 municipalities and school districts in Pennsylvania that have used the policy found that adoption of an LVT stimulated business activity, especially for the retail, wholesale, transportation, manufacturing and construction industries – all vital segments of Richmond's economy. Likewise, adoption of an LVT encouraged renovation of homes and stimulated the supply of new housing, especially within the multifamily housing sector.[2]

Land Value Tax has been shown to have direct fiscal benefits, as well.[3] Evidence indicates that taxes on land are not passed on to tenants, and the boost to housing supply that results from their implementation also helps put downward pressure on rents.[4] Simultaneously, by removing the tax penalty on improvements, adoption of an LVT has been found to *raise* overall property values. Further, research into the LVT plan proposed by Mayor Duggan in Detroit has found that it is likely to reduce the number of taxpayers in arrears, lowering foreclosure rates in the process. Together these results suggest that an LVT shift is a rare financial win-win for both homeowners and tenants. Finally, international research has also suggested that shifting taxes off of the productive economy and onto land can help to boost employment and growth. Existing economic theory and analysis of the on-the-ground effects of LVT implementation provide strong indications that an LVT shift in Richmond may be a progressive reform that can help achieve the inclusive growth goals articulated in the Richmond 300 masterplan.

[2] A full exploration of this research is available in the PPI research brief titled "What happened when Pennsylvania taxed land?", available here.

[3] A comprehensive review of the tax principles and economic evidence surrounding land value taxes can be found in the PPI research brief "What's so great about land value tax?", available here.

[4] The intuition, economic theory and empirical evidence on the tax incidence of LVT is examined in the PPI research brief titled "Is land value tax passed on to tenants?" available here.

Data & Methods *Calculate Current Tax Bills*

The primary analysis described here examines how property tax bills would change if Richmond adopted an LVT. Central to this effort is Richmond's Parcels dataset, which was provided to PPI's research team by the Office of the Assessor of Real Estate. This comprehensive dataset contains assessed land values (some $9.87bn in all) and improvement values (totaling $26.28bn) for each of Richmond's 75,783 properties (as of January 2023)[5]. The assessor's dataset does not include information on current tax bills, however.

As such, each parcel's bill was manually calculated by multiplying taxable value by the 2023 tax rate of $1.20 per $100 of assessed value. Data on Area Tax and Special Assessment Districts (provided by the assessor's office) were then added to relevant tax bills[6]. Finally, 4,359 properties identified as either tax exempt or as possessing no assessed value were assigned a tax liability of $0. These calculations yield $433.7m in property tax revenues for the City of Richmond, a total considered sufficiently close to the $454m reported in the ACFR to proceed with the tax shift analyses. In keeping with industry norms, Richmond's assessment data do not include any demographic information, yet truly understanding the impacts of a proposed LVT shift demands insights into the policy's anticipated impacts on different groups of residents, particularly minority households living in lower income neighborhoods. To facilitate this portion of the analysis, a spatial join was used to identify each property's census tract and correlate the values resulting from the above calculations with demographic data from the 2020 U.S. Census.

Calculate LVT Shifts

Implementation of an LVT can take a variety of specific forms. A "true land value tax," for example, completely untaxed improvement values, placing the entirety of the tax burden on land values. More modest policies, in contrast, put a greater emphasis (i.e. higher rate) on land values compared to improvements, but the latter are still taxed to some degree. While completely removing the tax on improvements is not legal in VA, there exists considerable discretion regarding which ratio may be right for Richmond. Seeking to understand the breadth of the rate options, PPI's analysis included three scenarios. Two relatively modest options based on competing tax proposals advanced by City Council Members (Scenarios 1 and 2), and one more ambitious formulation (Scenario 3), that more closely reflects the ratio used in other real-world implementations.

[5] This file was downloaded from GeoHub on 09/04/2023 Subsequent tax shift calculations assume that these adjustments will not be changed by the LVT shift.
[6] The analysis entirely excludes the rehabilitation tax credit and tax relief for elderly & disabled owners due to a lack of publicly available property-level data. Note that a LVT shift has a similar goal to the rehabilitation tax credit: ensure that the tax system does not discourage maintaining or constructing housing.

- Scenario1: Cut the tax rate on buildings by 3%, such that IV is taxed at $1.16(per$100).[7]
- This requires a tax rate of $1.31 on LV to leave overall revenues changed.[8]
- Scenario2: Reduce the tax rate on improvements by 8%, to $1.10, offset by a$1.47 tax on land.[9]
- Scenario 3: An 80:20 split between revenues generated from land vs improvements. This scenario requires a $3.52 tax on land values and enables taxes on improvements to be cut to $0.33.

Tax bills calculated under each of the three scenarios were compared to owners' current liabilities; and the following results section primarily focuses on these *changes* in tax bills under an LVT. (Note: this analysis does not change overall City revenues or spending, so all the scenarios above ultimately generate the same revenues as calculated from the current property tax: $433.7m.)

Key Concept: The Intensity Ratio

$$\text{Intensity Ratio (IR)} = \frac{\text{Improvement Value (IV)}}{\text{Total Value (TV)}}$$

One intuitive way of understanding whether and why any given property receives a tax increase or cut under an LVT is to calculate the following intensity ratio (IR):

By comparing the value of buildings and other improvements to the total value of a property, the IR provides an indication of how productively a piece of land is being used. Because an LVT shift rewards productive use of land, it will raise tax bills for properties with a low IR and reduce them for properties with a high IR. Summing across total property values, Richmond has an IR of 0.727 on average.[10] This means that all three proposed LVT scenarios will cut taxes for any property where IV is more than 72.7% of total value and will raise taxes on those properties which are below this point.

[7] A 3% property tax cut was proposed by Councilmember Nye. However, that proposal would have reduced overall City revenues, whereas the scenarios considered here are all revenue neutral

[8] A $1.16 tax rate $26.28bn of BV produces $304.8m in revenue. Because the city needs $433.7bn, it must now raise $128.9m revenue from $9.87bn land, meaning a LV tax rate of $1.31. Similar calculations take place for Scenarios 2 and 3.

[9] Councilmember Trammell once suggested an overall reduction in tax revenues via a $1.10 property tax rate. This rate is applied to LV and offset by an increase in the LV tax rate.

[10] $26.28bn IV divided by $36.15bn of TV = 0.727

Results

This section describes the implications of the LVT shifts proposed above, first by comparing how the three scenarios affect properties with different intensity ratios and applying this insight to a typical Richmond property. Next, it explores how tax bills change for different property types, and compares impacts across neighborhoods in Richmond, before finally estimating the effects for different socioeconomic and demographic groups. Tables 1 to 3 present the assessed values, tax rates and revenues generated from land and buildings under each of the three scenarios discussed above.

Table 1: Assessed Values of Land & Improvements

Assessed Values as of January 2023

Land	$9,867,910,000
Improvements	$26,277,420,000
Total	$36,145,330,000

Table 2: Tax Rates under each Scenario

Tax Rates (per $100)	Current	Scenario 1	Scenario 2	Scenario 3
Land	$1.20	$1.31	$1.47	$3.52
Improvements	$1.20	$1.16	$1.10	$0.33

Table 3: Revenues under each Scenario

Revenues ($)	Current	Scenario 1	Scenario 2	Scenario 3
Land	$118,414,920	$128,925,888	$144,692,340	$346,995,168
Improvements	$315,329,040	$304,818,072	$289,051,620	$86,748,792
Total	$433,744,960	$433,744,960	$433,744,960	$433,744,960

Land makes up 27% of taxable value in Richmond, and therefore generates the same share of City revenues under the current, single rate policy. Under the relatively mild LVT shifts of Scenario 1 and 2, this increases to 30% and 33% respectively; and under the more ambitious Scenario 3, land accounts for 80% of tax revenues.

Results at Different Intensity Ratios

As introduced earlier, the intensity ratio (IR) measures what proportion of total property value is comprised of improvements. Figure 1 shows the distribution of IRs across all properties in Richmond. Figure 2 in contrast, shows how tax bills change for properties with different IRs across each of the three scenarios.

Figure 1: Distribution of IRs

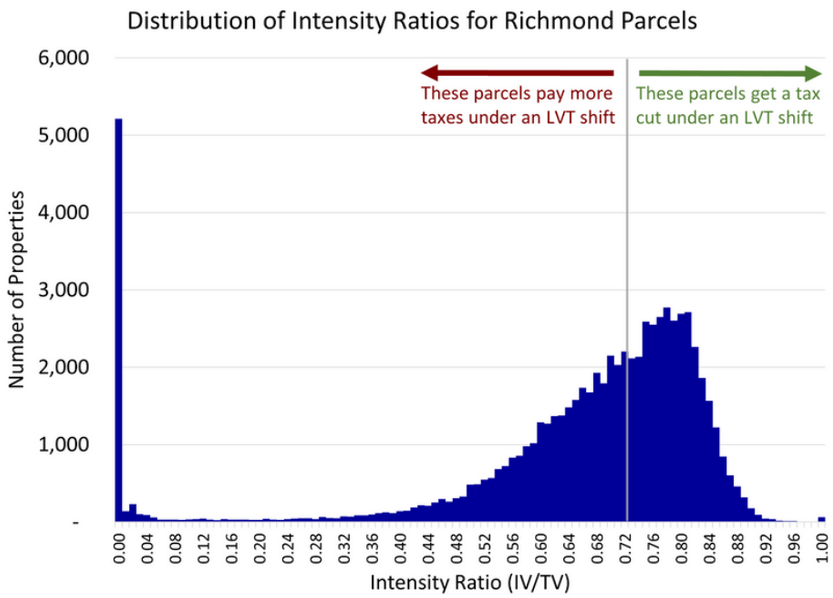
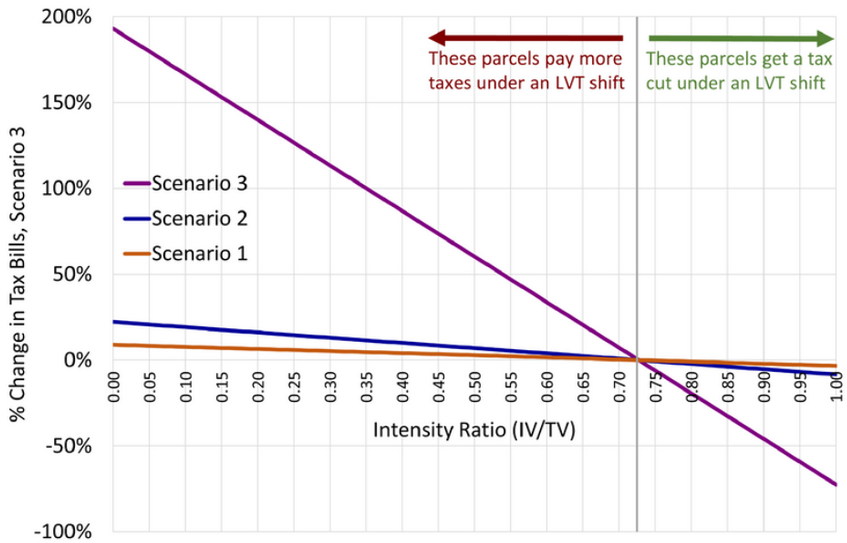


Figure 2: Percentage changes in Tax Bills at Different Intensity Ratios

Properties with an IR over 0.727 get a tax cut

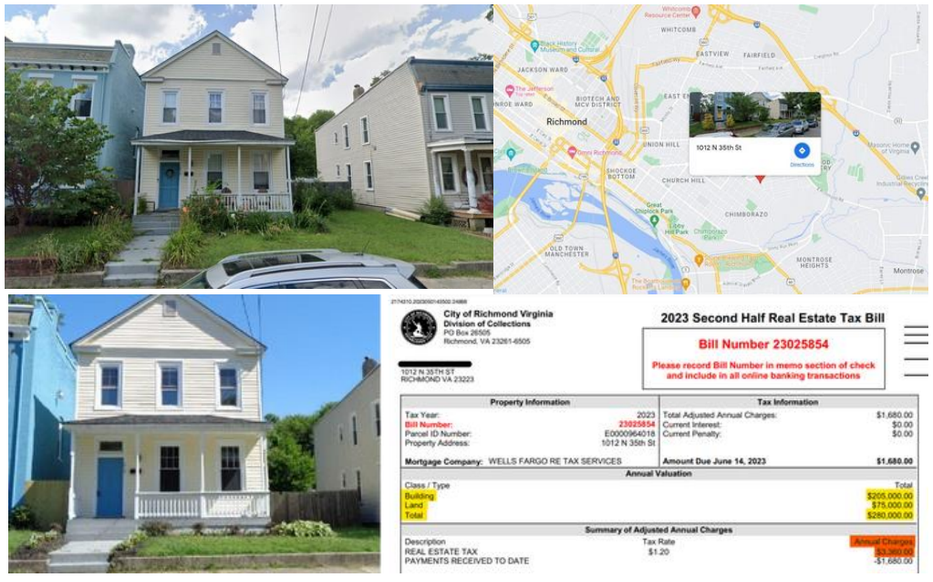


As Figure 2 shows, any given property will receive either a tax cut or a tax increase regardless of which LVT scenario is analyzed. The scale of these changes is determined by how significant an LVT is adopted, as well as the IR on that property. (Percentage and dollar changes under Scenario 3 are approximately ten times those for Scenario 2, and twenty times those for Scenario 1.) Richmond has close to 5,200 taxable properties which have an intensity ratio of zero, i.e. which are essentially vacant lots void of improvements. Figure 2 shows that these properties will face modest tax increases of +9% and +22% under Scenarios 1 and 2. For the more substantive LVT shift in Scenario 3, vacant land receives a tax increase of +193%. Nearly one fifth of all properties citywide have improvements worth 75% to 80% of total property value (an IR between 0.75 to 0.80), corresponding to tax cuts of between -1% to -2% under Scenario 1, -6% to -17% under Scenario 2, and -8% to -23% under Scenario 3.

Case Study: A Typical Richmond Home

Consider the case of 1012 N 35th Street, a single-family home in Oakwood which illustrates how an LVT shift will be experienced by a typical homeowner in Richmond. This property has an assessed value of $280,000, which produces an annual tax bill of $3,360 under the current property tax system, as shown in Figure 3.

Figure 3: Sample property at 1012 N 35th Street, including 2023 tax bill

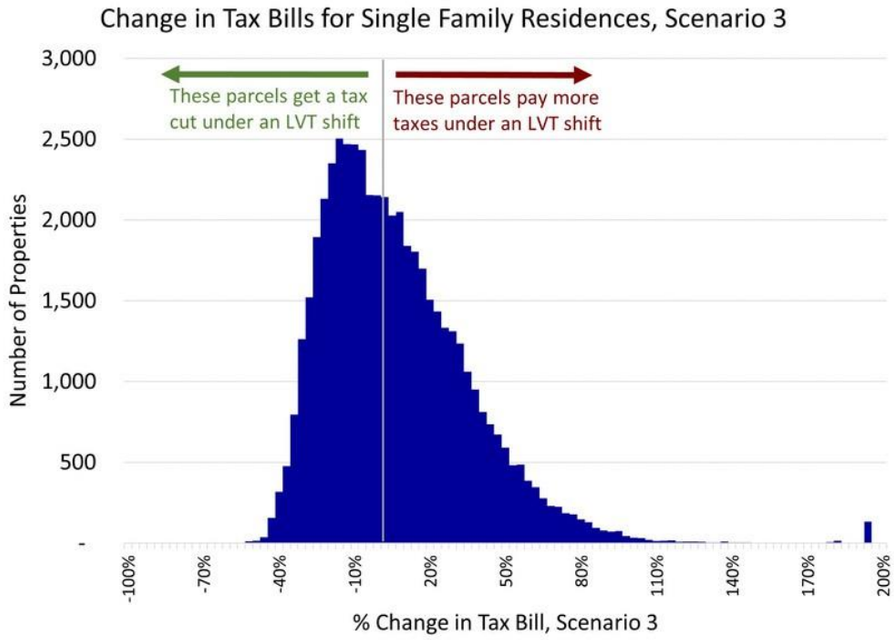


Split into its components, this property comprises $205,000 of improvement value (IV) built on top of $75,000 of land value (LV). Under Scenario 3 these values mean that 1012 N 35th St would face a tax bill of $3,314, a tax cut of -$46 or -1.4% compared to its current tax bill.[11] This property receives a tax cut because it has an IR of 0.732, which is very slightly above the citywide average of 0.727. For brevity, and because the third scenario produces the most pronounced impacts, the more detailed results below focus on tax changes under Scenario 3. Parallel charts and maps for Scenarios 1 & 2 can be found in Appendices 1 and 2 respectively.[12]

Impact of an LVT shift on Residential Properties

Figure 4 depicts the distribution of the change in property tax bills under Scenario 3 for single family residences (SFRs), which comprise 85% of all residential properties. Half of all SFRs receive a tax cut of up to
-35%; half pay up to +40% more under this LVT shift. It is worth noting that there are around 130 properties facing an increase of +194%; these are properties with an improvement value of $0, meaning they are likely to be vacant lots miscoded as SFR.

Figure 4

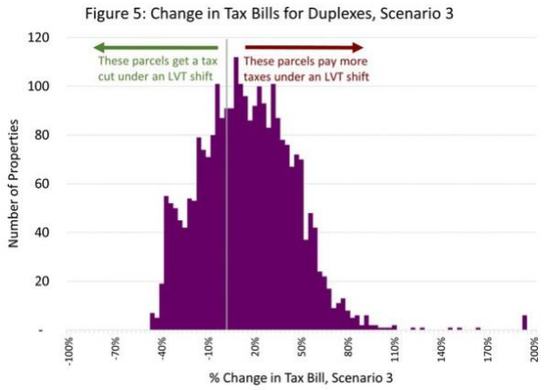


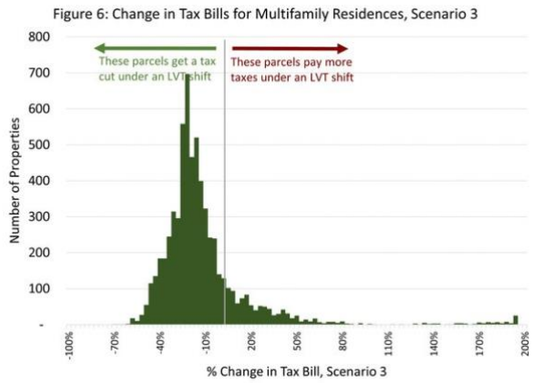
[11] [($0.33*$205,000) +($3.52*$75,000)]/$100 = $3,314 Readers are reminded that the dollar- and percentage-change

[12] values can be approximately converted from Scenario 3 to Scenario 2 results by dividing by 10, and to Scenario 1 results by dividing by 20

Only one third of duplexes pay lower taxes under an LVT shift, as illustrated by Figure 5. The reasons for this result are explained further in the analysis of neighborhoods below. As would be expected under an LVT, Figure 6 shows that the vast majority of multifamily residences receive a tax cut, typically of between -15% and -25% under Scenario 3 - a result that reflects LVT's clear financial incentive to respond to rising housing costs by developing mixed-use medium density housing or apartments.

Figures 5 & 6

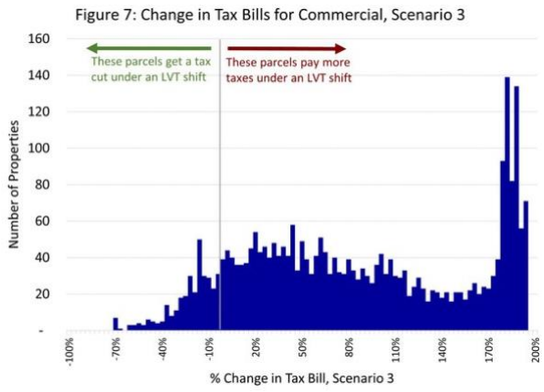




Impact of an LVT shift on Business Properties

There is a fairly even distribution of commercial properties (a category encompassing everything from convenience stores to car washes to general retail stores) that will see changes all the way from a -25% reduction to a +115% increase in their tax bill. Most properties, however, will see a tax increase under an LVT shift (see per Figure 7). The cluster of properties expected to receive significant increases in their tax bills (of +170% to +194%) are largely surface parking lots. Office buildings face a range of impacts under an LVT shift. There are a small number of tall, high-value office buildings (Class A or B, plus Research & Development) that will see reductions in their tax bills of around -10% due to their intensive use of land. Conversely, smaller office properties (typically classified as General, Medical or Professional Offices) will face tax increases under an LVT, as would be expected in conjunction with these lower intensity land uses.

Figures 7 & 8



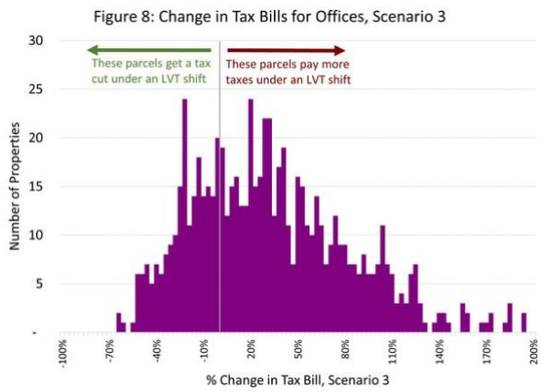
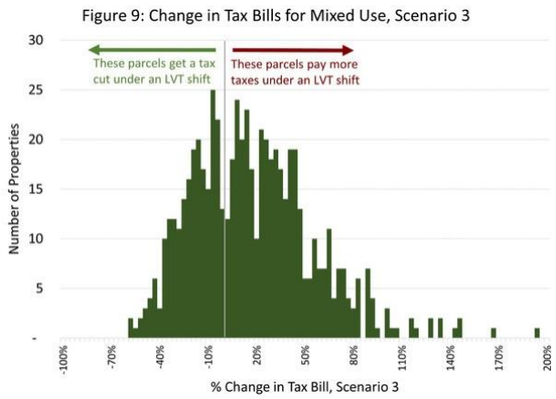
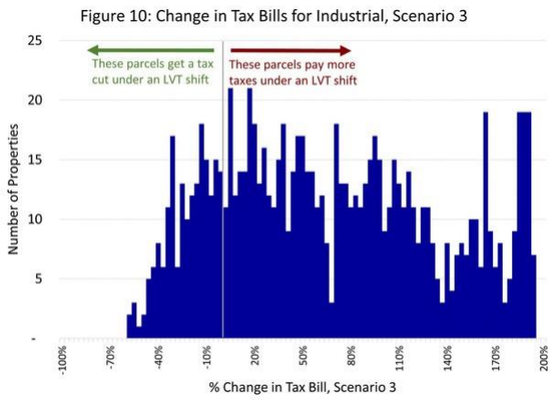


Figure 9 demonstrates a normal distribution of impacts for mixed use properties, typically ranging between a -37% cut and a +47% increase, averaging a +6% increase across all mixed use properties under Scenario 3. Industrial properties mostly face a tax increase, commonly ranging up to +120%, consistent with the land-intensive nature of activities like warehousing, light & heavy industry, and their associated vehicle parking.

Figures 9 & 10





Summary of Impacts by Property Type

Table 4 summarizes the above distributions by showing how tax bills will change on average across property types under Scenario 3. (Note, however, that this is averaging across a range of properties with quite large differences in value, so these results do not necessarily reflect the impact on a "typical" property within each class.)

Because single family residences comprise the vast majority of all parcels, the average impact of an LVT shift for this class of properties is close to zero, with a +$100 increase or +3% on average. However, there is substantial variation among SFRs, as Figure 4 demonstrates above. Duplexes see an increase of +$700 or +14% on average.

As discussed in greater depth below, this is because the majority are located in The Fan & Museum Districts, where land values are high. Conversely, multifamily properties receive significant tax cuts from an LVT shift, averaging nearly a -28% reduction under Scenario 3; a finding congruent with their highly productive use of land. Commercial properties face a tax increase on average, a finding that reflects the presence of surface car parking within this category. Due to the mathematical influence of a few high-value towers in this category, offices will receive a tax cut on average. Mixed use properties experience a small tax increase on average, as will land-intensive industrial properties. Nearly all properties identified as "vacant" by Richmond's assessing office were found to have no improvement, receiving the maximum tax increase of +194%.[13] Facing such an increase in their tax bills, and a lower tax rate on improvements, these properties will have a clear (and desirable) financial incentive to build on their land and put it to a more productive use.

Table 4: Change in Tax Bills by Property Type, Scenario 3

Property Type	#of properties	Average Property Value	Average Current Tax Bill	Average $ change in tax bill	Average % change in tax bill
Single Family	52,692	$358,900	$4,300	+$100	+3%
Duplex	2,704	$423,900	$5,000	+$700	+14%
Multifamily	6,830	$1,374,400	$14,100	-$3,900	-28%
Mixed-Use	627	$761,500	$8,700	+$500	+6%
Commercial	3,368	$1,038,000	$8,400	+$3,700	+44%
Office	806	$4,889,400	$45,800	-$9,400	-21%
Industrial	1,311	$1,718,100	$16,800	+$2,400	+14%
Vacant	5,887	$112,800	$1,000	+$1,800	+191%
All Parcels	75,651	$617,000	$5,800	$0	0%

[13] Because there are a few properties which have small positive IVs but are coded as vacant, the average change reported in Table 4 is +191%.

Impact of an LVT shift across neighborhoods

The above discussion makes clear that different property classes will be impacted in varying ways by the adoption of a Land Value Tax. The effects of this policy will have spatial dimensions, as well, particularly about the City's very different neighborhoods. Figure 11 (on the following page) maps the dollar change in tax bills for every single-family residence (SFR) in Richmond,[14] graphically illustrating how an LVT shift would change tax liabilities in different parts of the city.

Figure 12 displays the same data as percentage changes, allowing for easier comparisons relative to current tax bills. In both Figures, green dots indicate houses that will receive lower tax bills under an LVT shift, while purple dots indicate higher tax bills. Finally, Figure 13 summarizes these results, averaging the percentage changes realized by individual homes to yield the percentage change in taxes for all SFRs neighborhood wide. Some broad spatial trends can be observed in the maps below. Southside single family residences are the major winners, with 73% paying lower taxes under an LVT shift. Key exceptions include clusters of properties around Belmont Woods and Swansboro West. Properties close to the James River tend to receive a tax increase, largely due to their large lot sizes and high land values. Land values are higher north of the river, meaning that tax bills will increase for 70% of single-family residences there, especially in the Near & Far West. Pockets of properties receive a tax cut, especially around Brookland and Ginter Parks. In the East End there are lower taxes for much of Union & Church Hills, with increases around Eastview. This result is examined in greater detail below.[15] Not all Richmond residents reside in single family homes, so understanding effects on multifamily housing is important. An LVT shift tends to raise tax bills for duplexes in The Fan & Museum Districts largely because of high land values in this area (often around $85 per square foot). Duplexes elsewhere tend to be built on lower value land and therefore enjoy tax relief under an LVT shift. As discussed above, multifamily properties largely enjoy a lower tax burden after an LVT shift, reflecting their productive use of land. (Appendix 3 contains maps depicting the percentage change in tax bills for duplex [Figure A31] and multifamily [Figure A32] properties.)

[14] Only single-family residences are presented, to ensure that the map is comparing similar properties across space. Appendix 1 and

[15] 2 contain maps detailing the dollar and percentage change in single family residence tax bills under Scenarios 1 and 2 respectively. Note that there is no difference in the spatial patterns in terms of which properties pay more & less, these maps differ from Scenario 3 only in terms of the magnitude of the changes under an LVT shift.

Figure 11: Dollar Change in Tax Bills for Single Family Residences, Scenario 3

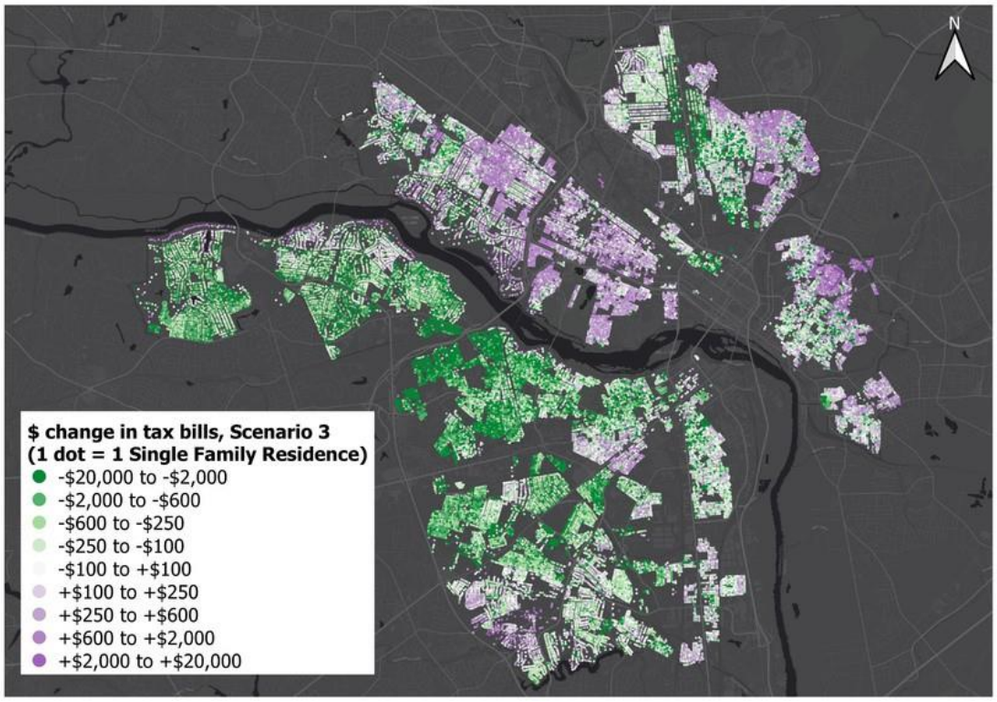


Figure 12: Percentage Change in Tax Bills for Single Family Residences, Scenario 3

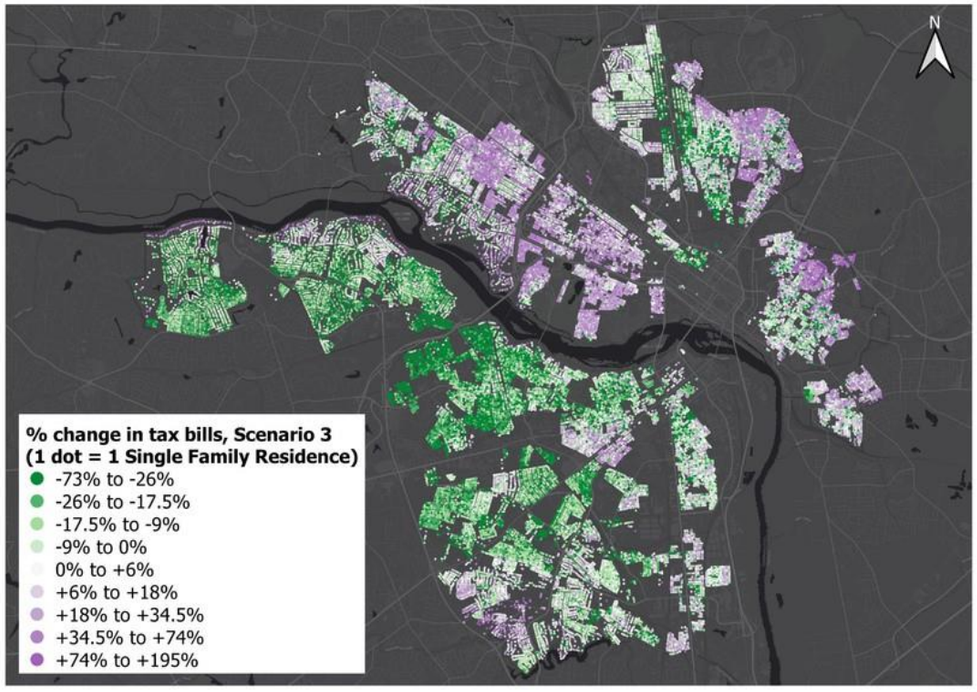
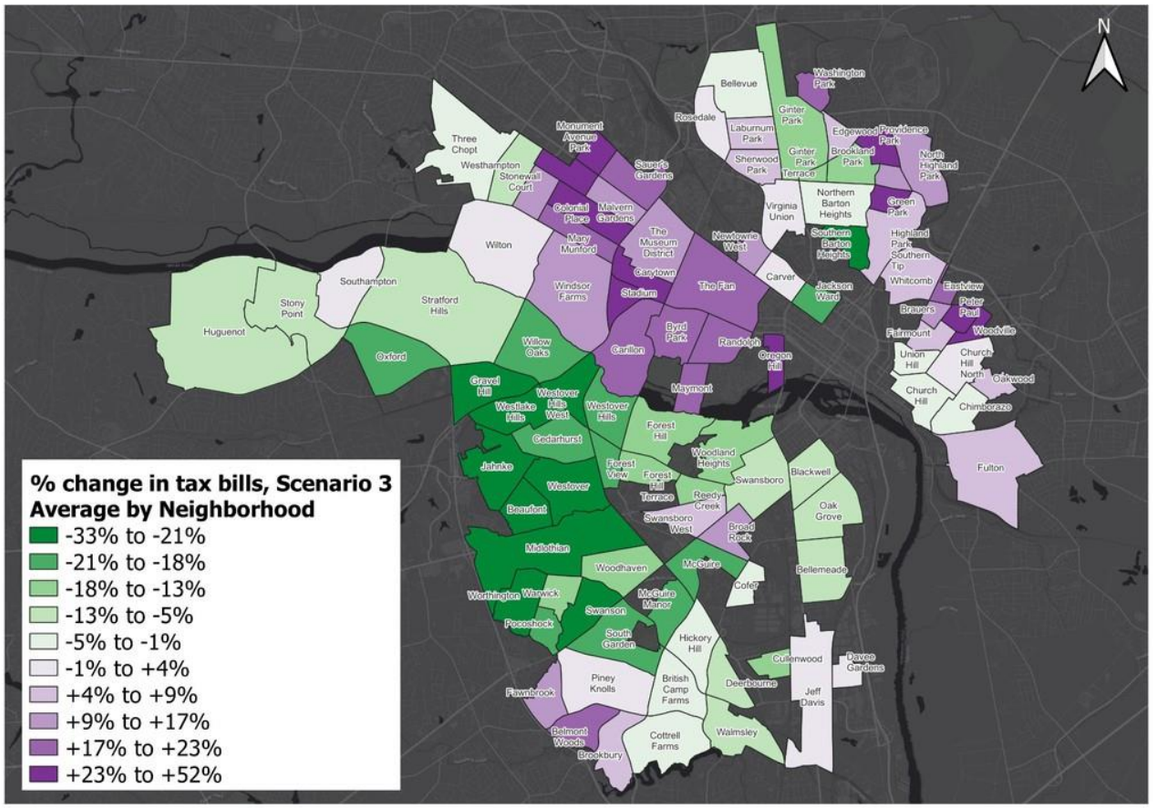


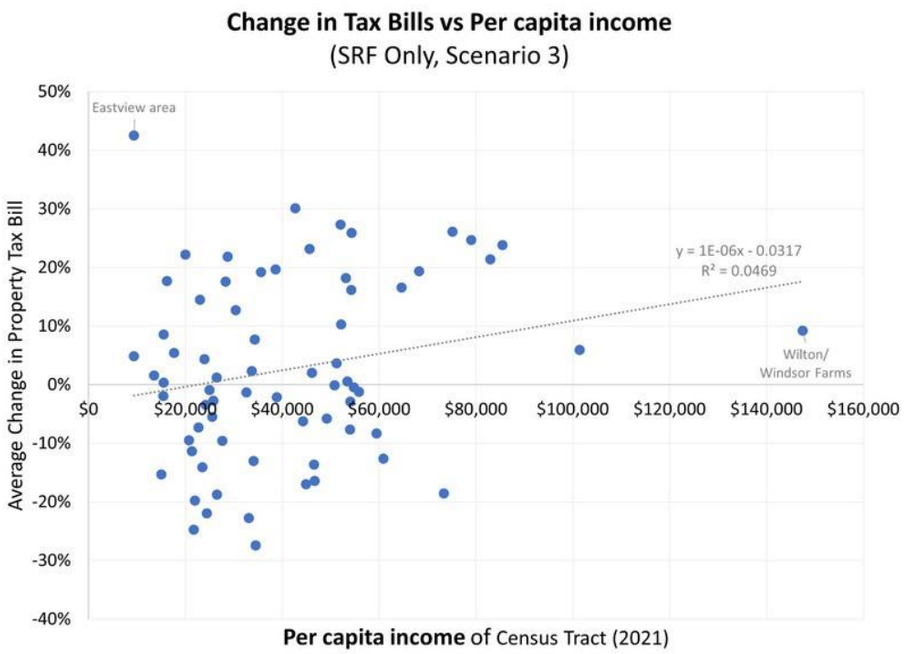
Figure 13: Average Percentage Change in Tax Bills for SFRs, by Neighborhood, Scenario 3



Income and Demographic Impacts of an LVT Shift

In the absence of owner-level demographic data, spatial correlations were used to predict how an LVT shift will affect different demographic groups. Accordingly, every property was tagged to its Census Tract, allowing comparison of racial characteristics and income statistics to the average change in tax bills for single family homes in the corresponding area. Figure 14 depicts the relationship between income and the average percentage change in tax bills for single family homeowners in each census tract. The upward slope of the trendline indicates that, on average, parts of Richmond with lower incomes will tend to pay lower property taxes under the Scenario 3 LVT shift, making an LVT shift a broadly progressive tax reform for Richmond. (Note that the Census Tract which contains Eastview is a clear outlier, facing sharp increases in tax bills despite being very low income. This result is examined in more detail below.)[16]

Figure 14: Percentage Change in SFR Tax Bills vs Census Tract Income, Scenario 3



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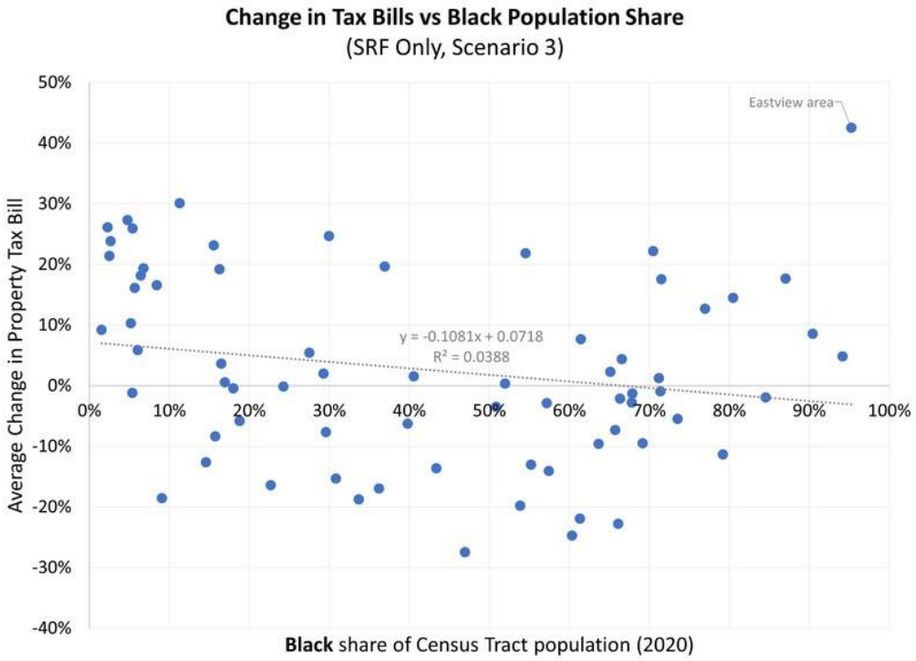
[16] This analysis focuses on single family residences to ensure that tax impacts are averaged across comparable types of properties. This ensures that the results are not confounded by the prevalence of duplex & multifamily residences in each area

Demographic impacts of a tax shift are also an important consideration, and Figure 15 presents the relationship between changes in tax bills and the Black population share in each Census Tract. Here it can be seen that the LVT shift tends to cause greater tax savings in neighborhoods which have more Black residents. (While not included here, neighborhoods that contain significant Latino/Hispanic populations are also expected to save under an LVT, while predominantly White and Asian neighborhoods are more likely to see a tax increase on average.)

Figure 15: Percentage Change in SFR Tax Bills vs Black Population Share, Scenario 3



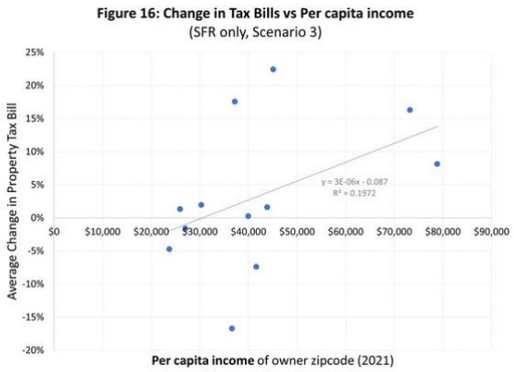
Key Concept: Is LVT passed on to tenants?

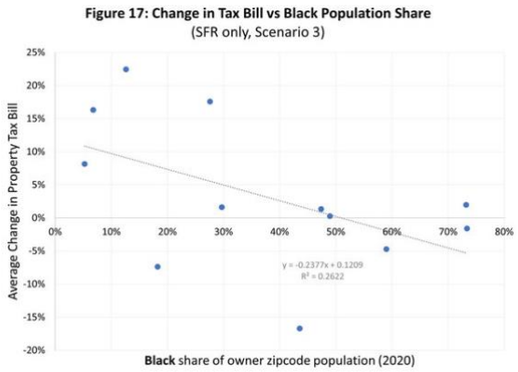
As noted previously, the area around Eastview is a clear outlier. Under Scenario 3, single family homes in this neighborhood will see an average increase of +42% in property taxes, despite the area being predominantly Black (95%) and very low income ($9,800 per person). However, this tax increase is unlikely to affect the residents of these homes, 90% of whom are tenants,[17] because economic theory and empirical evidence indicate that, unlike property taxes,[18] land value taxes come out of the pockets of landlords and are not passed on into higher rents.[19] By reducing the tax rate on improvements, an LVT shift can actually stimulate additional housing construction,[20] slowing the rate at which rents grow over time.[21] Thus, the demographic results depicted above do not fully capture the true picture of who will actually pay the LVT.

Impacts of an LVT Shift by Location of Property Owner

Like in every municipality, not every owner of Richmond's land actually resides in the City. To better capture the true location where LVT bills will be paid, Figures 16 and 17 repeat the above scatter plots, this time using the zip code where each property's owner is located.[22] The correlations are significantly stronger than those in Figure 14 and 15. An LVT shift in Richmond appears broadly progressive on income and tends to lower tax bills for property owners who live in neighborhoods with a high proportion of Black residents.

Figures 16 and 17





[17] The Parcels dataset indicates that one quarter of SFRs in Eastview are owned by a corporate landlord (as indicated by the name of the property owner containing phrases like "Corp", "LLC", "LP" and other variants) and half are owned by someone in a completely different zip code altogether.

[18] See Sirmans, Gatzlaff & Macpherson (2008) or Hilber (2017) for a summary of the literature showing that property taxes are more likely to raise rents in housing markets with more elastic housing supply.

[19] For the best study on this, see Høj, Jørgensen, Schou (2018) which found the land tax "does not distort the user cost of land".

[20] This research brief explains that LVT shifts in Pennsylvania stimulated housing supply.

[21] Been, Ellen & O'Regan (2023) summarize recent studies showing that "Increases in housing supply slow the growth in rents in the region".

[22] Census Tracts cannot be used here as the parcels dataset only reports property owner zip codes. This analysis ignores PO Boxes and Corporately-owned properties as these are likely not the true residence of the landlord in question.

Conclusions

A revenue-neutral land value tax (LVT) shift involves changing the property tax system into a split-rate structure by cutting taxes on homes, buildings and other improvements, offset by an increase in the tax rate charged against the value of land. As existing real-world applications of the policy have shown, this shift discourages zero-sum speculation on vacant & underutilized land, while rewarding investment in productive homes and businesses. Adoption of an LVT will likely impact the tax bills of every property owner in the City, which raises the question "who will benefit and who will pay more taxes?" This report answers that question by analyzing how tax bills change under three LVT shift scenarios. Using the City's intensity ratio of 72.7% as a guide, we find that vacant lots and surface parking lots face the largest increase in taxes under an LVT shift, with tax bills rising by +194% under Scenario 3. Similarly, modest tax increases are expected for less land-intensive industrial and commercial uses and small office buildings. In contrast to the anticipated increases in tax liabilities for these low intensity land uses, properties that use land more productively will see their tax liabilities shrink under an LVT. Large office towers, for example, will enjoy a tax cut. Likewise, multifamily residential properties are the key beneficiary of an LVT shift, typically enjoying a tax cut of between -15% to -25% under Scenario 3.

This outcome demonstrates how an LVT rewards efficient land use - in this case, the provision of many housing units on a single parcel of land, an outcome specifically identified as desirable within the Richmond 300 plan. Interestingly, many duplexes face a tax increase under an LVT, primarily because Richmond's existing stock of duplexes tend to be located on the high-value land in The Fan & Museum Districts. This finding is mitigated somewhat, however, by the fact that, with an LVT shift in place, landowners would face a smaller tax increase when they redevelop a single-family residence (SFR) into a duplex. The tax effects on single family residences are split down the middle: half pay less, and half pay more under an LVT shift. Fully 73% of SFRs in the Southside enjoy a tax cut, with one key exception being those properties close to the James River which have large lot sizes and high land values. North of the river land values are also high, meaning that 70% of SFR tax bills will increase under a LVT shift, especially in the Near & Far West. Pockets of properties enjoy a tax cut around Brookland Park and Ginter Park. In all, PPI's analysis revealed that an LVT shift will be broadly progressive in Richmond, tending to increase taxes in neighborhoods which are higher-income or have a higher proportion of white households, with offsetting reductions (or smaller increases) in property taxes charged in neighborhoods which are low-income or have a higher Black population. Progressivity is even more clear when the analysis focuses on the zip codes where each property owner resides. Tenants are helped in general as a tax system which raises rents is replaced by one which penalizes speculators and rewards housing construction.

Next Steps

This report has focused on the question of who pays more and less property taxes under a simple LVT shift. As such, the analysis described here did not include precise analyses of anticipated future impacts (such as rates of housing construction, business formation, or property values) that can be expected to occur post-implementation. The current research also fell short of exploring available mechanisms to smooth the transition from the City's current (single rate) property tax to a split rate policy, and did not specify the new exemptions, improvements, and other policies that may be necessary to build broad public support for LVT's implementation. So, while it is clear that an LVT will likely bring a variety of benefits to Richmond, significantly helping the City realize the ambitious goals set forth in the Richmond 300 masterplan, it is now recommended that additional research be conducted to address the above considerations, along with any others that may be surfaced in the course of policy discussions among elected officials and other constituents. Finally, readers are reminded that a parallel research project (supported by the Richmond Association of Realtors) was conducted in conjunction with the work described herein. These findings should be considered in conjunction with the results of that work, which examined how an LVT shift will impact twelve case study sites and discusses the way in which the policy will help capture the additional land value created through the rezoning called for under the Richmond 300 plan.

Appendix 1: Results for Scenario 1

Figure A11

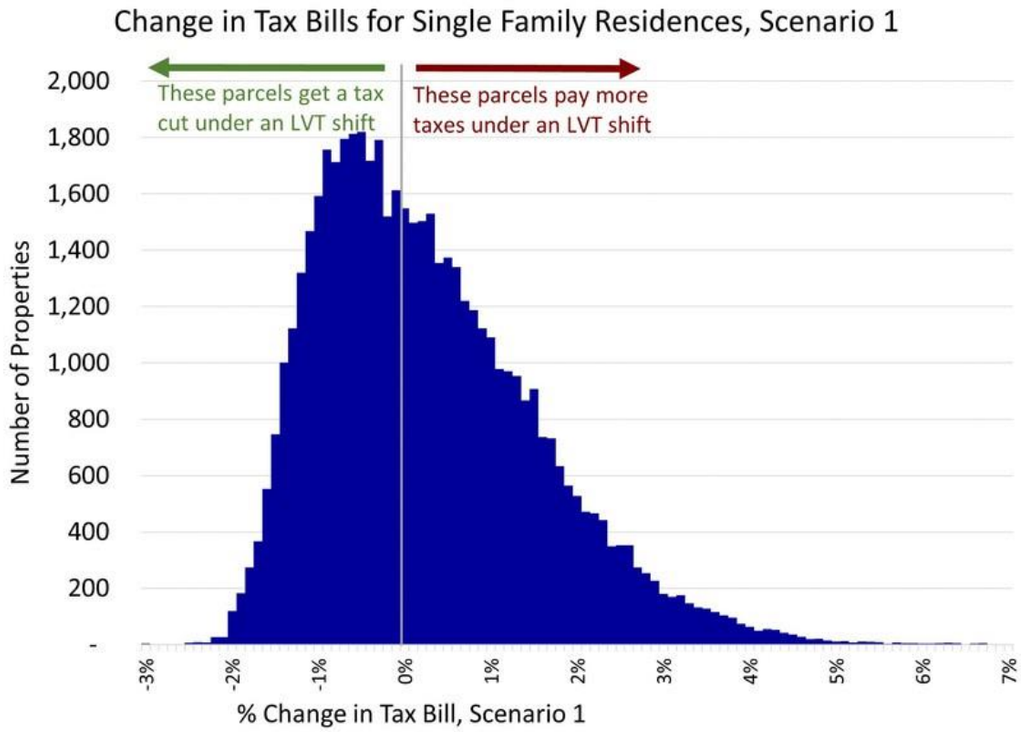


Table A11: Change in Tax Bills by Property Type, Scenario 1

Property Type	#of properties	Average Property Value	Average Current Tax Bill	Average $ change in tax bill	Average % change in tax bill
Single Family	52,692	$358,900	$4,300	+$5	+0.1%
Duplex	2,704	$423,900	$5,000	+$33	+0.7%
Multifamily	6,830	$1,374,400	$14,100	-$178	-1.3%
Mixed-Use	627	$761,500	$8,700	+$23	+0.3%
Commercial	3,368	$1,038,000	$8,400	+$170	+2.0%
Office	806	$4,889,400	$45,800	-$434	-0.9%
Industrial	1,311	$1,718,100	$16,800	+$110	+0.7%
Vacant	5,887	$112,800	$1,000	+$85	+8.8%
All Parcels	75,651	$617,000	$5,800	$0	0.0%

Figure A12

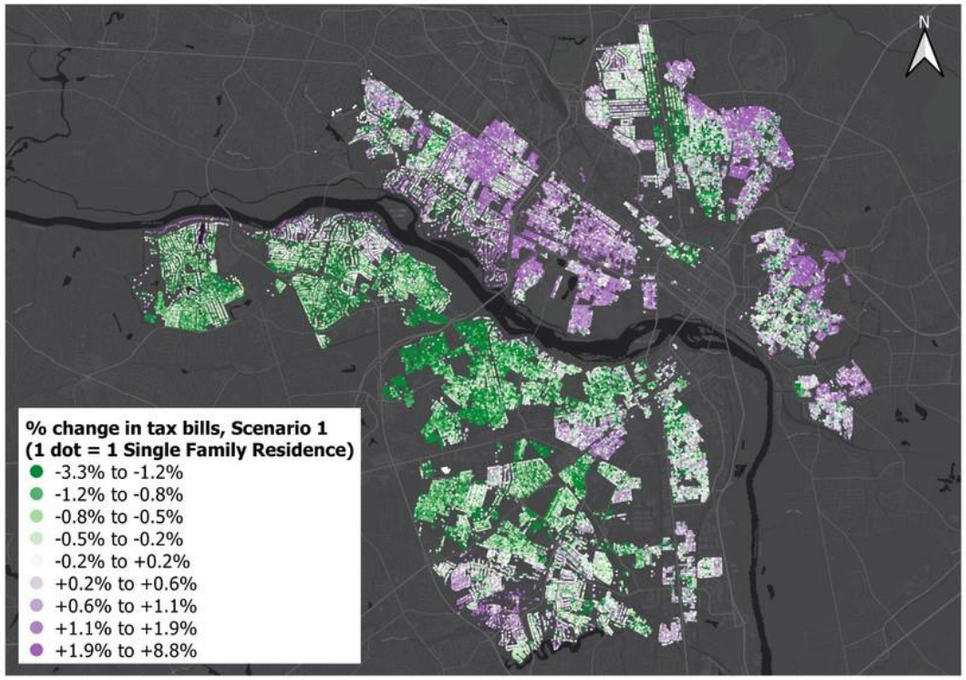
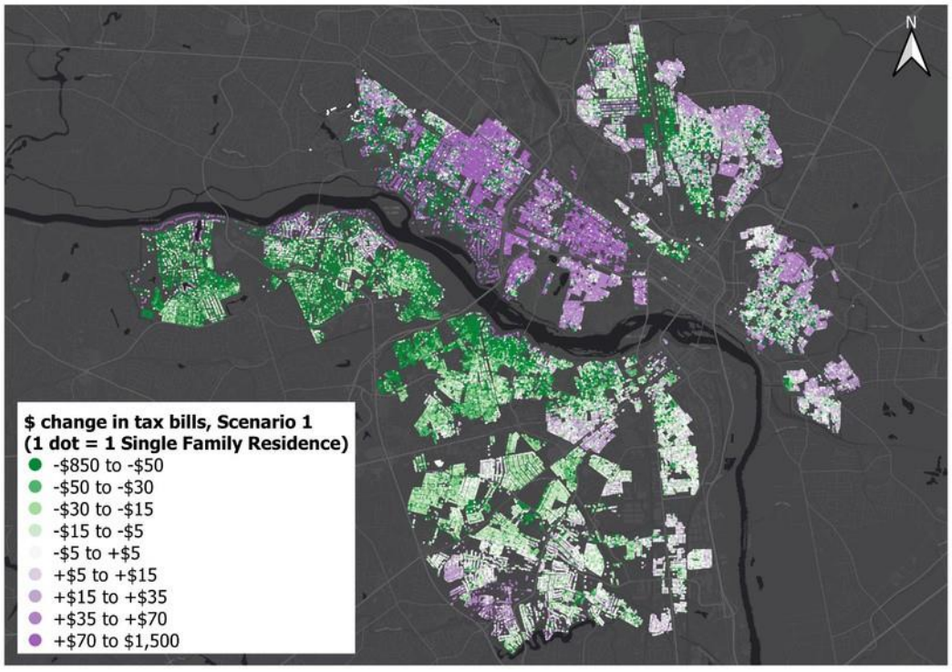


Figure A13



Appendix 2: Results for Scenario 2

Figure A21

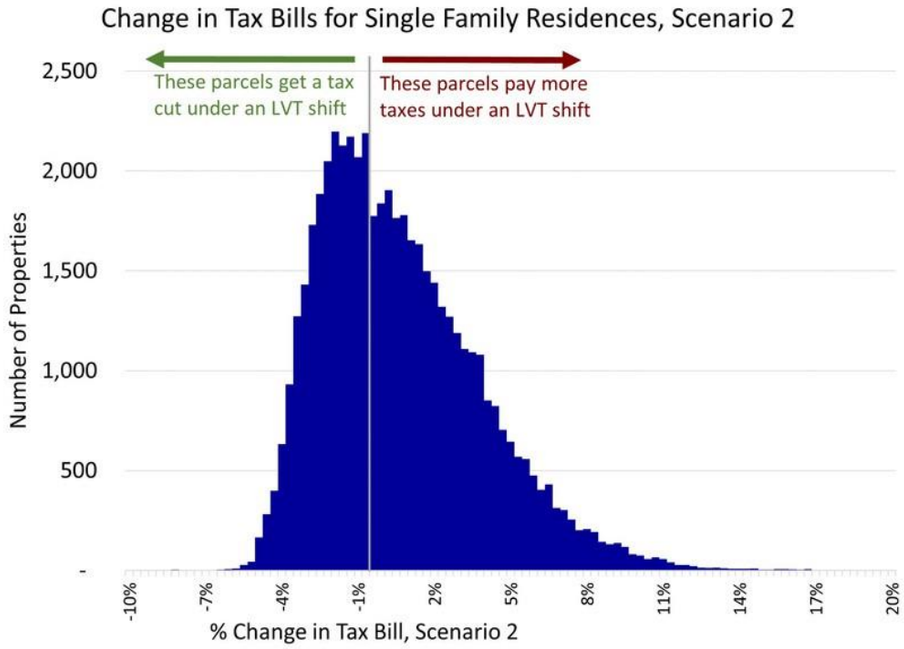


Table A21: Change in Tax Bills by Property Type, Scenario 2

Property Type	#of properties	Average Property Value	Average Current Tax Bill	Average $ change in tax bill	Average % change in tax bill
Single Family	52,692	$358,900	$4,300	+$13	+0.3%
Duplex	2,704	$423,900	$5,000	+$83	+1.7%
Multifamily	6,830	$1,374,400	$14,100	-$445	-3.2%
Mixed-Use	627	$761,500	$8,700	+$56	+0.6%
Commercial	3,368	$1,038,000	$8,400	+$424	+5.1%
Office	806	$4,889,400	$45,800	-$1,086	-2.4%
Industrial	1,311	$1,718,100	$16,800	+$275	+1.6%
Vacant	5,887	$112,800	$1,000	+$212	+21.9%
All Parcels	75,651	$617,000	$5,800	$0	0.0%

Figure A22

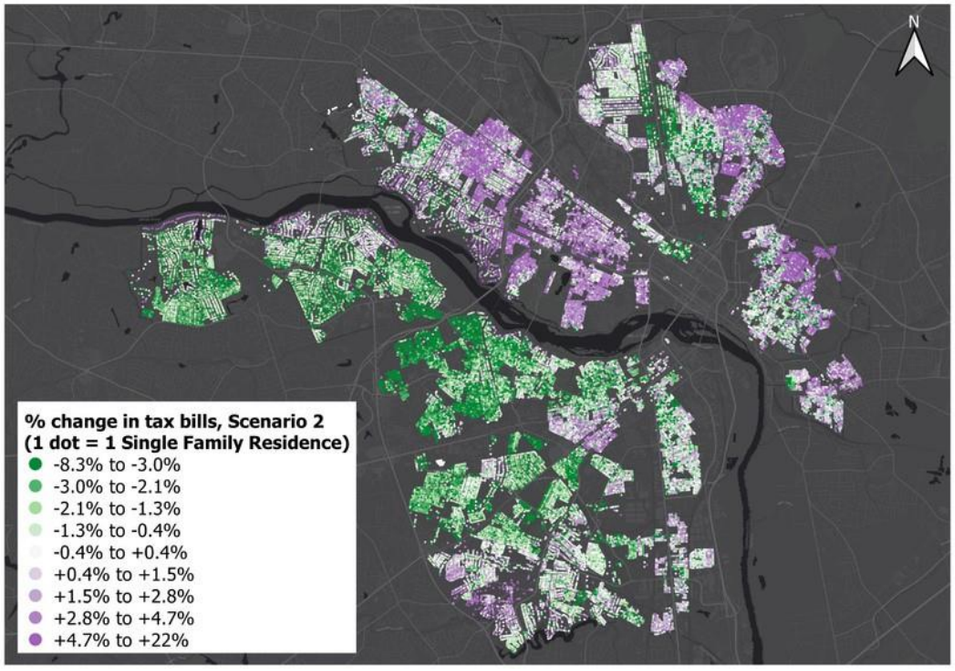
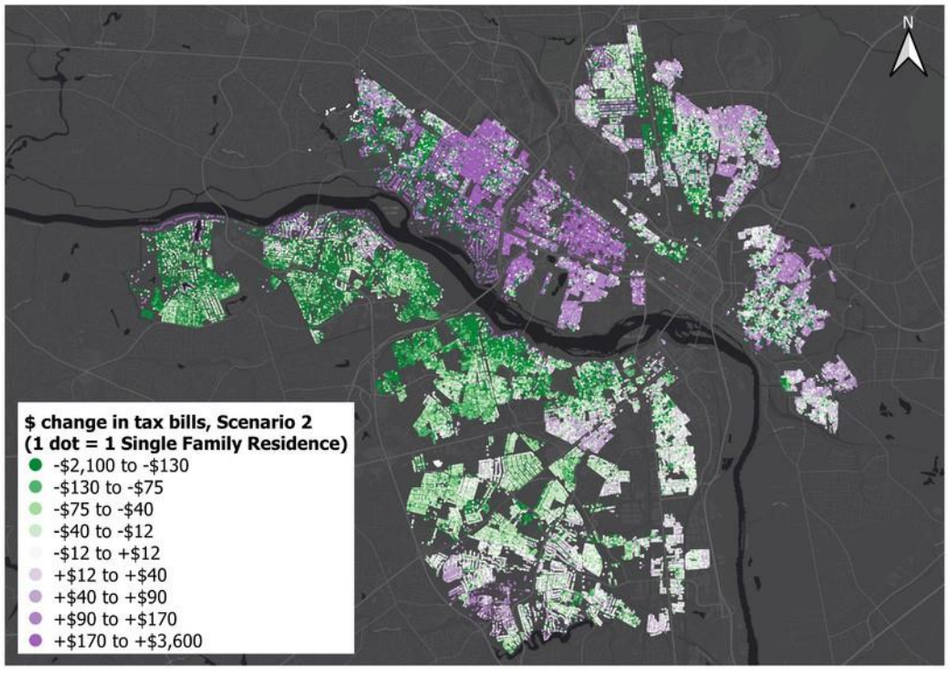


Figure A23



Appendix 3: Supplementary Results for Scenario 3

Figure A31: Percentage Change in Tax Bills for Multifamily Residences, Scenario 3

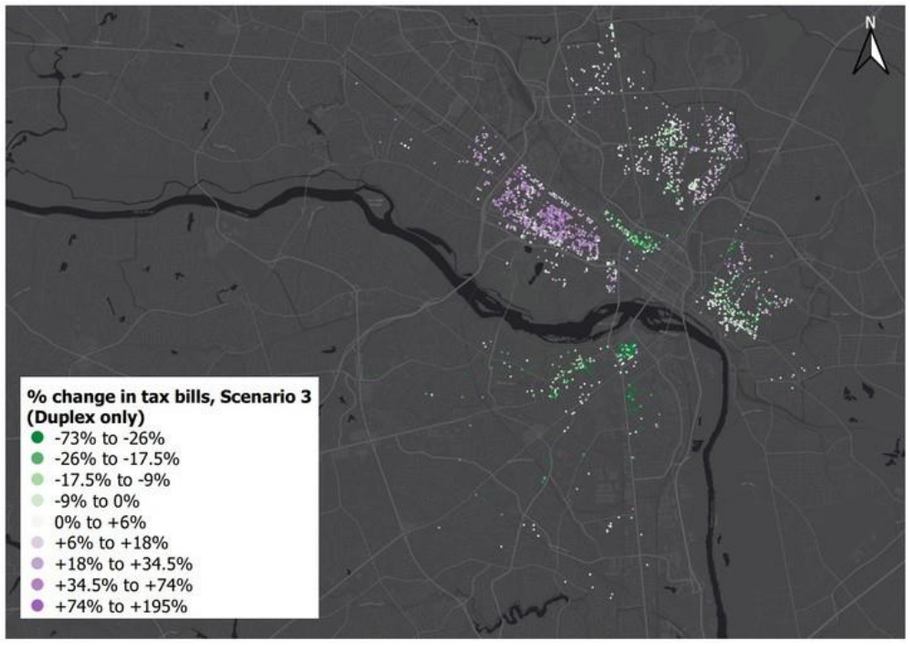
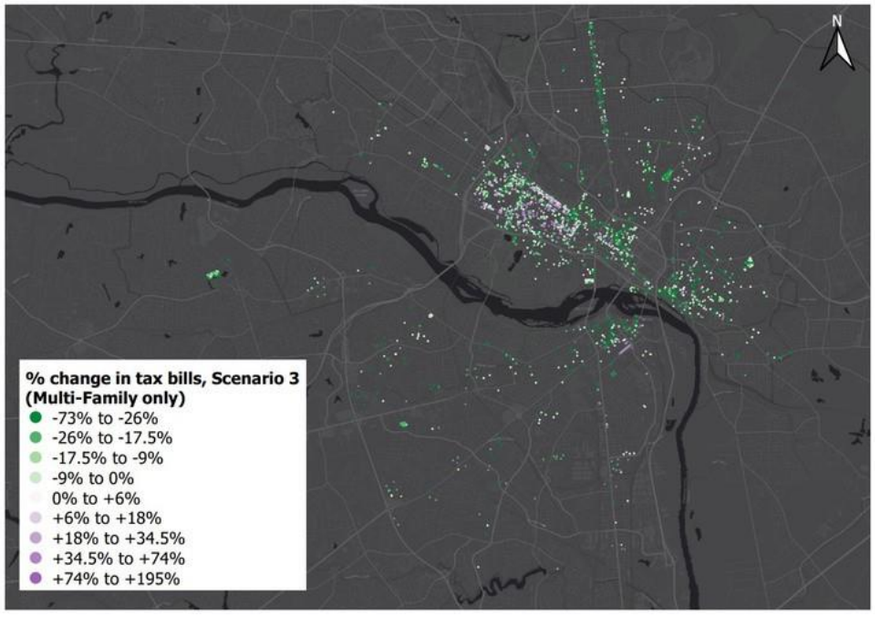



Figure A32: Percentage Change in Tax Bills for Multifamily Residences, Scenario 3