

Center for the Study of Economics

1518 Walnut Street, Suite 604

Philadelphia, PA 19102

215.545.6004/fax: 215.545.4929

manager@urbantools.org www.urbantools.org

The taxation of land values in New York City: theory and options

A report to the office of the Manhattan Borough President - February 2008
Eron Lloyd and Joshua Vincent

About the Center for the Study of Economics

The Center for the Study of Economics (CSE) is a 501 (c) 3 non-profit educational foundation. We were established in 1980 as the sister organization of the Henry George Foundation of America a 501 (c) 4 established in 1926. Our mission is to research land value taxation, to assist governments in implementation and to study the effect of land based property taxation where used. We suggest implementation where appropriate but do not support political candidates or become involved in the electoral process.

The Center also gathers and disseminates articles, studies and monographs on the subject of land based taxation¹. The Center believes that taxation of labor and capital in urban areas is one the driving forces to the contraction and decay of our cities.

CSE researches the taxation of land values as it effects the jurisdictions as a whole, and parcel by parcel. We measure and analyze revenue streams and the outcomes of tax shifting. We are not assessors or planners. When we see a problem with the accuracy of real property values, we recommend changes when values are unlike within class and jurisdictions. We have implemented

¹ www.urbantools.org www.henrygeorgefoundation.us

our program when values are consistently inaccurate across the board, usually a situation requiring equalization, but not a mass reappraisal.

What is a Land Value Tax (LVT)?

Land value taxation (LVT), or site value taxation, is a tax that charges landholders a portion of the unimproved value of a site or parcel of land. Land, in the broadest sense as defined by economists is not simply the ground under one's feet. Land also encompasses air, sea, natural resources, the broadcast radio spectrum and all other items of value not created by humanity.

For the purposes of this report, LVT is very much like our Wikipedia entry:

“Land value taxation (LVT), or site value taxation, is a tax that charges landholders a portion of the unimproved value of a site or parcel of land.

LVT is a special form of property tax. There are three species of property: land, improvements to land (immovable man-made things) and personal property (movable things).

LVT is an ad valorem tax where only the value of land is taxed, ignoring improvements to the land (e.g., houses, factories, ...) and personal property (e.g., cars, furnishings, ...). This is different from other property taxes which generally tend to fall on real estate--the combination of land and improvements to land.

Taxing land values can be a major tool for strengthening urban economies, reducing taxes for productive taxpayers and complementing planning solutions. Conversely, a tax on land values may serve as a particular revenue source or funding tool for a perceived social or fiscal need.

For the former, the city of Pittsburgh still serves as a prime example of what land value tax (LVT) should achieve, with optimum systems of good assessment and a wide base of tax incidence on land². This was the case in that city in the 1920s and 1930s. The latter application of LVT - after the heyday of municipal property taxation in the 1930s to 1950s - is conceded by most authorities to still have been a success³ even in the face of bad assessments and diluted tax incidence on land⁴.

Today, the city of Harrisburg and its long-time Mayor Stephen Reed credit LVT with being a major tool in the fiscal and demographic turnaround of a city with few apparent resources in human capital of geographic location. The City of Harrisburg taxes land at six times the rate of buildings.

For the latter, LVT can serve as an unobtrusive revenue measure for central business district⁵ or as a funding mechanism for a particular capital project, such as a highway interchange for the

² <http://s3.amazonaws.com/hgfa/m/pdfs/willi.004.pdf>

³ http://www.lincolnst.edu/subcenters/valuation_taxation/dl/oates_schwab.pdf

⁴ http://www.buec.udel.edu/craige/nta_lvt.htm

⁵ <http://legistar.city.pittsburgh.pa.us/attachments/4301.DOC>

construction of a railway system. For example, the Pittsburgh Downtown Improvement District funds itself by a tax of .0412%.

This is more commonly called Land Value Capture (LVC)⁶. Although calls for LVC date back at least a century⁷, the concept is still little understood by decision makers (though not by policy creators), and concrete examples of implementation are few.⁸

In a real sense, our **Proposal A** (below) will be a more limited application, related to a defined revenue need as determined by New York City government.

New York City and Land Value Taxation: Is there a Need?

"To talk about 'good' and 'tax policy' in the same breath when you're talking about the New York City property tax is impossible," said Dick Netzer, an emeritus professor of public administration at New York University and a leading authority on city's property taxes. "It's a foul institution."⁹

Why should the city of New York consider any change to its property tax system? After all, the city by any measure is one of the world's great success stories. Truly, if you can make it here you can make it anywhere.

However, there is a downside to the constant inflow of capital, talent and money into New York City especially the island of Manhattan. Fallout from success results in the disappearance of formerly affordable residential neighborhoods and buildings.

Those who might have avoided Harlem, Morningside Heights or other areas that at one time were perceived to be “sketchy” have gentrified beyond recognition. Most reasonable people would agree that the increased tax base, increased jobs, and the pulsing energy that defines the turnaround of New York City has been a good thing.

Although those on the very fringe of debate might disagree, the transformation of upper Manhattan or Alphabet City has been preferable to the chaos and decay of the late 1960s and early 1970s.

Yet a problem remains.

⁶ <http://www.vtpe.org/smith.pdf>

⁷ By Erie (Pa.). City planning committee, John Nolen, Erie Area Chamber of Commerce, , Erie (Pa.). Board of Trade 1914 <http://books.google.com/books?id=v3gAAAAAYAAJ&printsec=titlepage&dq=nolen+erie>

⁸ http://66.223.94.76/pubs/dl/1134_BonillaGaleano_complete_web.pdf

⁹ *New York Times* March 12, 2006” In the City's Taxes, Murky Equations”
<http://www.nytimes.com/2006/03/12/nyregion/12taxes.html>

That problem is a lack of affordable housing. The first section of the report concentrates on one basic reason for lack of affordable housing: the presence of vacant or seriously underused land not only in the Borough of Manhattan but in the other four boroughs as well.

For years this has been a silent issue in New York City. What has been rarely understood until the recent call to action by Manhattan Borough President Scott Stringer, is that much of the vacant land that exists in New York City is very valuable land indeed.

This has often not been recognized, although institutional studies are recently coming around to the realization that the lack of affordable housing in New York City is due less to the usual suspects: rent control, too many rich people, construction costs, etc. but more likely is the result of a lack of reasonably priced land and slowness in getting land rezoned for residential use.

As this report will show however, New York City is not suffering from a lack of vacant land, and certainly has a surplus of underused land. The final step in addressing this issue is to examine the stock of land (and land value). We will look at the outcome of using market forces (i.e. the value of land) to address a problem at the root: a lack of incentives or forceful inducements (or, if you will, “the carrot and the stick”) to not get just buildings put up or rehabilitated but to actually pry marketable land from the hands of speculators.

The Newman Real Estate Institute of Baruch College in its landmark 2005 study “Affordable Housing in New York City¹⁰” is clear on the many challenges facing New York and its efforts to get land into use.

The solutions brooked by the Newman study are fairly straightforward:

1. Increasing the New York City Real Estate Property Transfer Tax to yield subsidies that would assist in the construction of 80,000 units annually of affordable housing. The clearest obstacle in adopting the solution, is that real estate transfer taxes have been shown to be regressive¹¹, and in fact punishes the type of real estate market transaction that New York City government at all levels prefers. Even though the New York City RETT is slightly more progressive¹², implementing a new tax on transactions in the light of declining real estate market seems counterproductive.
2. Using building permit fees to redistribute the effort not just of new construction but also rehabilitative construction from Manhattan (and the still hot neighborhoods in Brooklyn) to the other outer boroughs. This option does not clearly tie the fee paid to the benefit derived in another place. Certainly, this option appeared to call for an additional layer of administration, verification and like other options, applies only to those who know to apply for it.
3. Inclusionary zoning, always an optional program for developers, is to be expanded. The report is quite clear in the conclusion of many that mandatory inclusionary zoning tends

¹⁰<http://zicklin.baruch.cuny.edu/newman/research/affordable-housing-report-2005/>

¹¹ [http://www.realtor.org/smart_growth/nsf/docfiles/RETransferTaxes.pdf/\\$FILE/RETransferTaxes.pdf](http://www.realtor.org/smart_growth/nsf/docfiles/RETransferTaxes.pdf/$FILE/RETransferTaxes.pdf),

¹² http://home2.nyc.gov/html/dof/html/property/property_rec_rptt.shtml

to depress land values, and is not really worth the “heavy lifting” that using the police power of the city would require.

4. Rezoning strikes many observers from most political and policy spectra as a way forward. This report will help buttress that suggestion, if only because it is recognized that changing the zoning of an area of land changes the value of the land. Rezoning is probably the most powerful “right now” change that a planning or zoning commission can make, in conjunction with neighborhood desires and wishes. Presumably, up-zoning can be reliably tracked, to measure the response of the market to these newly valuable sites; yet paradigmatically the Newman/Advocate's report throughout, calls for an extractive approach to providing affordable housing, an approach once easily achieved through traditional forms of redistribution of resources through taxation, but politically problematic today.¹³

Essentially, the report is similar to most studies in New York City and nationwide over the past 25 years, with prominence given to the traditional two points of view about how to solve questions about housing. One point of view is the redistributionist view; the other is the *laissez-faire* “let the market do it” view. In the view of CSE, there is another way.

Perhaps by using market defined values, land values created by the community, geography and government, a fund may be created to address housing needs of New Yorkers, or to provide reduction on those that invest their labor and their capital into the city of New York. Because New York City as a community, a government and an organic whole creates land (or site) value, that community has a right and a duty to collect that publicly-created value.

Precedent in Policy and Proposal

The concept of tapping land values to provide a revenue source for city government or to provide an incentive for new housing is an old one in New York City. In the early part of the last century, The Final Report on the Committee of Taxation¹⁴ in 1916 demonstrated the intense battleground that existed among various interests that wanted to implement traditional property taxation, land value taxation (or the two-rate version thereof), personal property taxation income taxation in various combinations of the above. The final recommendation voted for traditional property taxation in hideaway from land value tax, or property tax and others. One could say this report was – until now - the high water mark for the level of discussion taxation of land values reached the New York City.

Yet, in the decade following New York City implemented a program very similar to land value taxation indeed¹⁵. In the 1920s, Governor Al Smith, spurred by the continuing economic

¹³p.19, 24, 31, 33

http://pubadvocate.nyc.gov/policy/documents/TheContextofAffordableHousinginNewYorkCity_000.pdf

¹⁴ <http://www.urbantools.org/research-and-studies/Final-Report-of-the-Committee-on-Taxatio.pdf/view>

¹⁵ <http://www.economics.ucr.edu/papers/papers01/01-01.pdf> “The Resurgence of New York City after 1920” a paper by Dr. Mason Gaffney, professor of economics University of California/ Riverside

downturn existing in New York City and elsewhere pushed the Legislature to enact the 1920 law¹⁶ wherein total exemptions for new construction were granted to \$5,000 per house or apartment building that amount later increased to \$15,000. Land values were pointedly nonexempt. By any measure, this program although temporary, had the desired result.

New construction more than tripled while in other big cities it barely doubled. Not only was there more housing, and thus lower cost apartments, there were more jobs and higher wages for construction workers, and more business for merchants who sold goods to the employed workers.

Economic good times in New York came to an end, though, when owners in 1928 began to anticipate the expiration of the tax-shift law¹⁷.

Even today in New York City, much of the most desirable housing stock and also what should still be the most affordable housing stock, was built during this period in the 1920s in very early 1930s.

After New York's decline in the 1960s and 70s, the problem of denser and more affordable housing became a discussion at the center of public policy. The old idea of down taxing buildings returned.

CSE, at the request of Council President Vallone studied LVT on a class and parcel by parcel basis in 1994 and 1995. After repeated requests from Kurt Richwerger, finance director of the Council at that time, the finance department provided not only class land and building total, but provided CSE with actual billable values on a parcel by parcel basis. This data proved invaluable at the time, and its importance will become apparent later in this report.

Most recently, the Department of Finance, in 1999, in its report "Reducing the Cost of New Housing Construction in New York City¹⁸" again identified the availability and cost of vacant land is a prime factor in the expense building new residential construction in New York City. Page vi of its executive summary recommends:

"New York City should reduce tax burden on residential apartment buildings and expand the pilot property tax reform abatement program to include rental properties. It should also tax vacant land at a higher rate promote the development of housing."

The Proposal for Consideration

¹⁶ New York State laws of 1920, chapter 949 section 4 - B

¹⁷ Post, Charles Johnson, 1984. How NY solved its housing crisis. NY: Robert Schalkenbach Foundation. Excerpts from a pamphlet, 1951, "What Private Enterprise Can Do". NY: American Association for Scientific Taxation, Inc.

¹⁸ http://furmancenter.nyu.edu/CREUP_Papers/cost_study_1999/Summary.pdf

We will begin with several assumptions:

1. There is enough land to provide a basis more housing and more affordable housing in New York City.
2. There is not enough incentive for the private holders of vacant land to develop or to sell to those who will develop that land.
3. Current tax rates on the other species of property (income, sales, business and the building portion of the real property tax) are high enough to make increased revenue streams a political nonstarter.
4. The classification of most vacant land in New York City under the rubric of Class One, while meant to serve as a benefit for the homeowner class in the late 70s and early 80s served instead the interests of land bankers and those who otherwise do not take opportunities in the market to develop those parcels.

Is there enough vacant or underused land? The City Planning Department in discussing land use in New York City notes that:

“Approximately eight percent of the city’s land is classified as vacant. Staten Island has the most vacant land with more than 5,300 acres, Manhattan the least with less than 400.”¹⁹

Although vague, this information is useful a springboard to direct attention where it must be paid: value, not size or area.

What the planners say may be true, but it misses the point: the value of those 400 acres of land in Manhattan (or any borough), if properly cataloged, valued and taxed would present a citywide resource to provide affordable housing subsidies, quality-of-life budget items, and a real motivating factor in letting the market acquired this land for use right now.

As it stands, using 06/07 assessments, the full market value of raw vacant **taxable** land (and our estimate of underused land) in the Borough of Manhattan (400 acres) is about \$2.6 billion (\$6.5 million per acre). In Staten Island, the full market value of raw vacant **taxable** land is \$3.74 billion (or \$705,000 per acre). Of course, the true value of land in New York City is not to be found in the assessment rolls. It is not in the purview of this report to either highlight the inconsistency or inaccuracy of land/building values in New York City. As with any real-time application of tax policy, the data provided has to be the data used.

Caveats

The dataset is based on the final 06/07 roll. In order to get the most stable set of numbers in the outcome, we've avoided much of the confusion of other studies in the New York City property tax system by using either Full Market Value and applying Assessed Value based on the

¹⁹ <http://www.nyc.gov/html/dcp/html/landusefacts/landusefactshome.shtml>

assessment ratios used by the city²⁰. Essentially, this study uses frontloaded assessment data, and not backloaded parcel-by-parcel assessment cap increases, veterans' exemptions, J51, 421 or other reductions.

CSE's intent in this report is to confirm that there is indeed a reason to move forward, not necessarily to adopt any particular recommendations at this juncture.

CSE hopes this report will serve as a launch for further, deeper study. For example, there is no database that has been made available to us that contains absentee ownership data. Census Tracts are not easily plugged into the parcel identifiers (The BBLEs).

Objects of Study

A. "A Proposal to change the assessment/tax treatment of vacant land in New York City"

B. "A study of the revenue outcome of a two-rate shift of taxation from improvements to land in the four existing classes"

The first option is to study and envision the creation of a new class of property, following precedent in New York law and also as the most likely to be immediately clear to both policy makers and the public.

The second option observes the result of the revenue-neutral outcome of a four-class LVT shift. Since as recently as the 1980s, Class Three land and buildings were taxed at different rates (no citation of statutory permission has been found), there is no seeming *legal* impediment to this program.

What will be studied

The Center for the Study of Economics (CSE) a 501(c)3 research foundation has been working with municipalities since 1980 in the effort to get urban land into use without the use of costly public subsidies (often paid for by taxpayers who cannot afford it) or at the least to complement the subsidies.

Again, CSE concentrates its efforts exclusively on the revenue impact of taxation on buildings -- or other forms of labor and capital -- and land values. As has been noted by Borough President Stringer ""Some view them [vacant lots] as liabilities. I say they're our best assets.²¹" Land is very different from buildings especially in the sense of taxation. How do land and buildings behave even though taxed in the same manner and rate? Within the real property tax there are two answers, and CSE works with the property tax system for two reasons:

²⁰ 6% for residential, 45% for all other classes.

²¹ <http://www.drummajorinstitute.org/library/article.php?ID=6650>

Why?

The Bad

Most cities (with some exceptions like Philadelphia, New York, Scranton, or Detroit) rely to a great degree on the property tax. As a source of revenue, it is stable, predictable and easy to administer. Unlike wage, business or sales taxes, it is hard to avoid.

Yet, one part of the property tax has problems equal to other taxes on labor and capital: the property tax on buildings. Countless studies and economists have proved that high tax rates on buildings have a corrosive effect on investment, construction and rehabilitation of existing structures.

Old but classic industrial and commercial properties that might have been warehoused or mothballed while waiting for a new use were knocked down by the dozen, so that the (often absentee) owner could avoid taxes. A prospective homeowner deciding where to live would logically choose a site in the lower-taxed exurbs. It is a sad axiom that many of New York City's nurses, police, cook, etc. live not in New York City but sometimes up to ours way (for example, the Poconos).

The Good

The other part of the property tax is a tax on land values. The effects of a tax on land values are very different.

First, a homeowner or a business does not create land values. The community, most often through government investment and services, creates land values. If the community creates those values, the justification for the community recouping those values is clear.

Second, the current system of a low tax on land values leads to land speculation and private land banking. The holding cost of land under our current tax system assures that the landowner can hold out for a very high price for a very long time.

Third, a higher tax on land values (coupled with reduction in building taxes) creates an incentive to sell that land, or do something with it rather than waiting. In other cities that use land value taxes, real estate markets start to work again. Neighborhoods recover. New York City's case is very particular, however.

There are enough subsidy, abatement and giveback programs to make construction in New York City a bonanza for the private market. Yet, many authorities have identified the high cost of land and assembling land parcels of the greatest obstacles to writing rental housing. When land is freed for development or sale on the open market, the cost of that land forces the builder/developer to make sure high-end properties are constructed. The high cost of land can be correlated into high costs for working and poor residents.

As illustrated in a Drum Major Institute article on the illogic of the existence of vacant land in Manhattan while there is a desperate need for housing²², one particularly pernicious section of the real estate regulations, dating back to the late 1970s/early 1980s allows vacant lots north of 110th St to be assessed at Class One (residential) assessed to market value and ratios (in the case of New York City, 6%), as long as they are adjacent to other Class One properties²³. The rest of the boroughs see a vast preponderance of vacant land demarked as Class One. Why this outcome?

Evidence points to the common desire of elected officials to “help homeowners” but there are many examples to be found that reward some very valuable properties to the point of absurdity under this system: a vacant lot on East 65th Street market valued at \$9,260,000 is billed on \$375,199 for tax purposes.²⁴

A clear path of responsibility for this legislation actually leads to Richmond County, where Staten Island led the run-up in land values after the city’s recovery had commenced. A 1989 New York Times article touched on this when the law permitting classification (S-7000, Article 18 of the Real Property tax law) was changed to permit “storage” of vacant land under Class One²⁵

We share the view that many authorities recently have come to share: this relic of the 1970s keeps much valuable land out of use. This land can be used as apartments and other dense but affordable construction.

A complicating factor to the creation of available land parcels – and by extension affordable housing – is the finding by New York ACORN²⁶ that many of the lots (66% according to the story) once held by the city after defaults and foreclosures in the 1970s were sold at auction. Significantly, for this report, the preponderance of these lots are in the Bronx (Morrisiana, Hunts Point, Mott Haven) and Brooklyn (Brownsville, Bushwick and Bed-Stuy).

This is the background for our report and our recommendations.

Option A:

A Proposal to change the assessment/tax treatment of vacant land in New York City

There are 46,248 vacant or nearly vacant (buildings with less than a less than a 10% share of the parcel’s value) taxable parcels of land in the city of New York. The raw

²² Ibid.

²³ http://www.citylimits.org/content/articles/viewarticle.cfm?article_id=3487

²⁴ <http://nycserv.nyc.gov/nycproperty/statements/mvh/jsp/stmtassessmvh.jsp?statementId=117047049>

²⁵ *New York Times*, July 2, 1989, Alan Oser “New York City’s Property Taxes: The Homeowners’ Break on Assessments.”

²⁶ *New York Times* February 25, 2003 Michael Cooper “City-Sold Lots Stay Vacant”

valuation (full market value of these parcels) is \$6.06 billion (The raw market value of all New York City land is \$40 billion). There is a clear-cut resource that city has left untapped. Therefore, we propose to devise a “Class Five” of real property that will comprise entirely of vacant land. The purpose of this Class Five would be to serve as a resource for affordable housing subsidies, financing low-interest loans for sweat equity developers/rehabbers or for corresponding tax reductions on certain classes of property or other taxation.

What properties would be in Class 5?

CSE believes that not only are purely vacant parcels part of the problem but agrees with the MBP’s office (and Picture the Homeless) that buildings still standing, but crumbling through “demolition by neglect.” Demolition by neglect is defined as the destruction of a building through abandonment or lack of maintenance. In the case of New York City, this process can transform high-taxed class 2 or 4 properties (assessed at 45% of market value) into a sheltered Class 1.

Number of Parcels

For the purposes of our study, we assume that a lot is vacant if 10% or less of the parcel’s value is structural. This produces a city-wide inventory of 46,248 with at least some land value. (Total vacant lots amount to 82,964 vacant parcels, many with no ascribed value). We will call this “Class Five.”

Borough	Parcels
Manhattan	3,268
Bronx	6,710
Brooklyn	14,329
Queens	11,760
Staten Island	10,181
Total	46,248

Figure 1- Prop A

Class Five Parcels by Borough

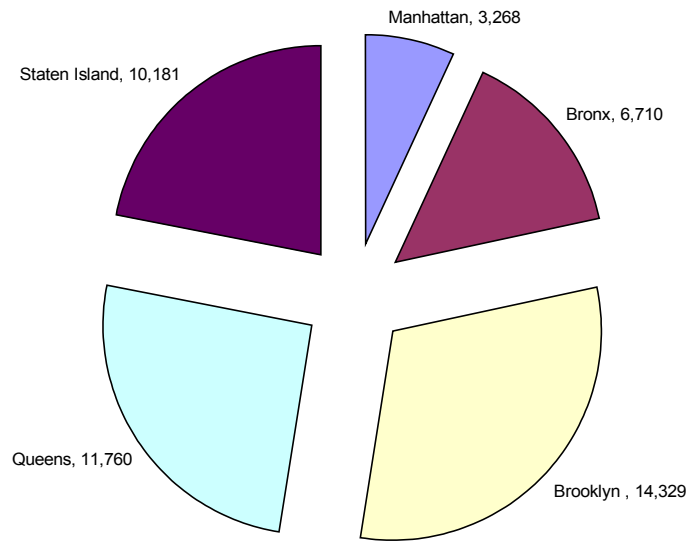


Figure 2 Prop A

Vacant Parcels by Class, No Values for 25%

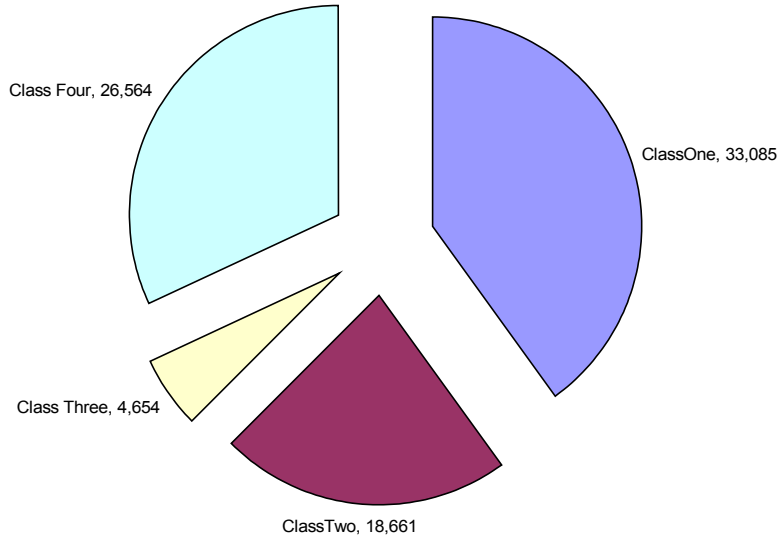


Figure 3- Prop A

Value of Parcels

The number of parcels is, in the end, not as relevant as their value and their worth to the city in terms of tax revenue.

How valuable are these parcels? If we look at *assessed value*, the ratio of assessed-to-market, the total vacant value is 1.900 billion. Yet, when the full market value of taxable parcels is referenced, the amount jumps to \$6.066 billion. Broken out by borough, the distribution is dramatic, as are the percentage differences between assessed and market values:

Borough	land_market_value	land_assessed_value	Percent Difference
Manhattan	\$1,625,796,296	\$710,816,016	128.72%
Bronx	\$563,778,538	\$144,459,073	290.27%
Brooklyn	\$1,287,433,986	\$396,058,409	225.06%
Queens	\$1,397,952,394	\$421,332,604	231.79%
Staten Island	\$1,191,124,158	\$227,643,487	423.24%
Total	\$6,066,085,372	\$1,900,309,589	219.22%

Figure 4- Prop A

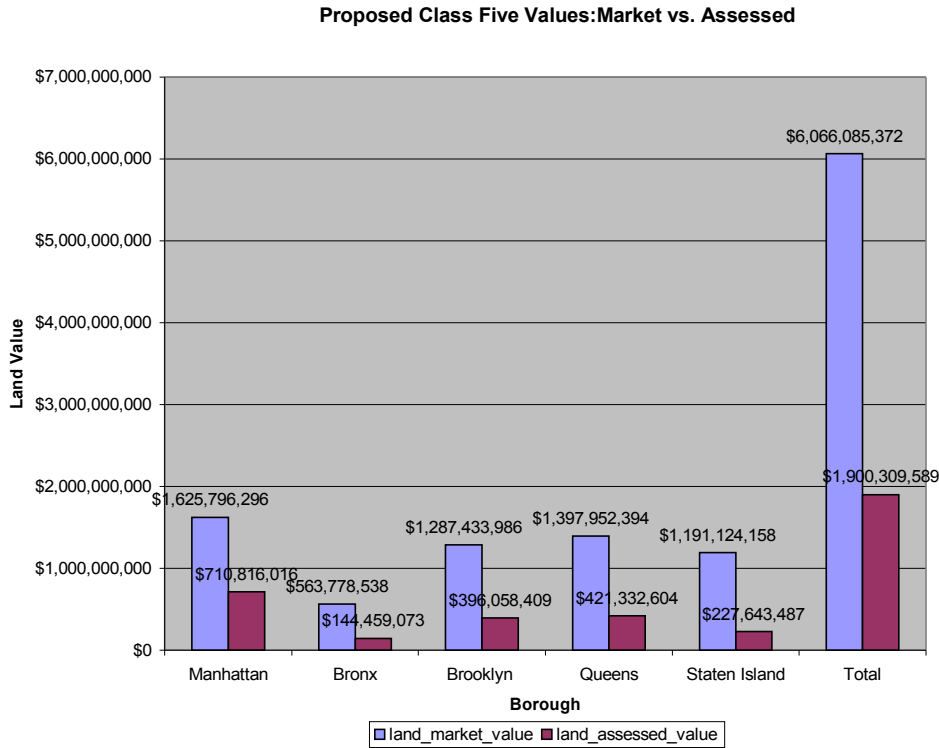


Figure 5 - Prop A

One notes that Manhattan's ratio is so much closer to market value. The reason is straightforward: with so little Class One (assessed at 6% of market value), and so much at Class 2 or Class 4 (45% of market), Manhattan climbs close to real value; much of the vacant value is in Class 4 (or 2).

As the revenue breakdown in this report will show below, Class One reigns in the outer boroughs (and also in upper Manhattan), a result we'd expect from the legislation and practice of the past 25 years.

Sample Legislation

Put simply, this is our proposal:

Resolution

WHEREAS a higher tax rate on land assessments would cause vacant land to be put to an efficient use, thereby improving New York City's economy

RESOLVED, that the State Legislature be urged to pass a law allowing New York City to establish a fifth class of taxable property consisting of vacant land or under-used land

(10% or less of building value relative to land value). The tax rate and assessment-to-market value of such land is to be determined by the New York City Council.

Be it further Resolved that a Class Five property will not enjoy the benefits of slow value increases (such as the 6%-20% rule).

Be it further Resolved that a Class Five property will rejoin its original zoned intent after the taxable median value for that building code is built upon that vacant site.

Although the language and rates can be flexible, we are basing our numbers on an across the board valuation of 100% of market value. We believe that for too many years, citizens and business people have simply not understood the property tax. By starting with a type of property that many in the city believe to be a resource or a nuisance, the “reality” of 100% market value may be the first step to establishing a property assessment and tax system that is not seemingly designed to frustrate good public policy. The land can be a good first step towards that goal.

Recommendations and Results: Possible Revenue Streams

We have provided several scenarios to best highlight what can be considered “hidden” economic rent due to the City of New York. Our proposal is similar to the “Serrano Bill”, which would transform upper Manhattan Class One vacant, along with certain other outer borough parcels so classified.

Currently, the assessed value of vacant or underused land is \$1,900,309,589 raising revenue of \$198,476,707. We propose to raise the assessed valuation of those various land uses from Class One to Four, and treat the land at the provided Full Market Value (FMV). As an example, here we will apply a tax rate of 5.5% to the FMV for the city’s stock of taxable land²⁷. FMV will provide any ranges of revenues. This example is for the purposes of this report. Other revenue options are in the Appendices.

Borough	Tax Current @ AV	Class 5 @ 5.5%MV
Manhattan	\$60,870,398	\$89,418,796
Bronx	\$16,166,708	\$31,007,820
Brooklyn	\$45,505,492	\$70,808,869
Queens	\$48,419,499	\$76,887,382
Staten Island	\$27,514,610	\$65,511,829
Total	\$198,476,707	\$333,634,695

Figure 6 - Prop A

The revenue increases per borough:

²⁷ Please note we do not propose to change the tax treatment of the small amount of building values that occur with underused parcels. They are to considered mile markers for the purposes of identification.

Percent Difference	Dollar Difference	Borough
46.90%	\$28,548,398	Manhattan
91.80%	\$14,841,111	Bronx
55.61%	\$25,303,378	Brooklyn
58.79%	\$28,467,882	Queens
138.10%	\$37,997,219	Staten Island
68.10%	\$135,157,988	Total

Figure 7- Prop A

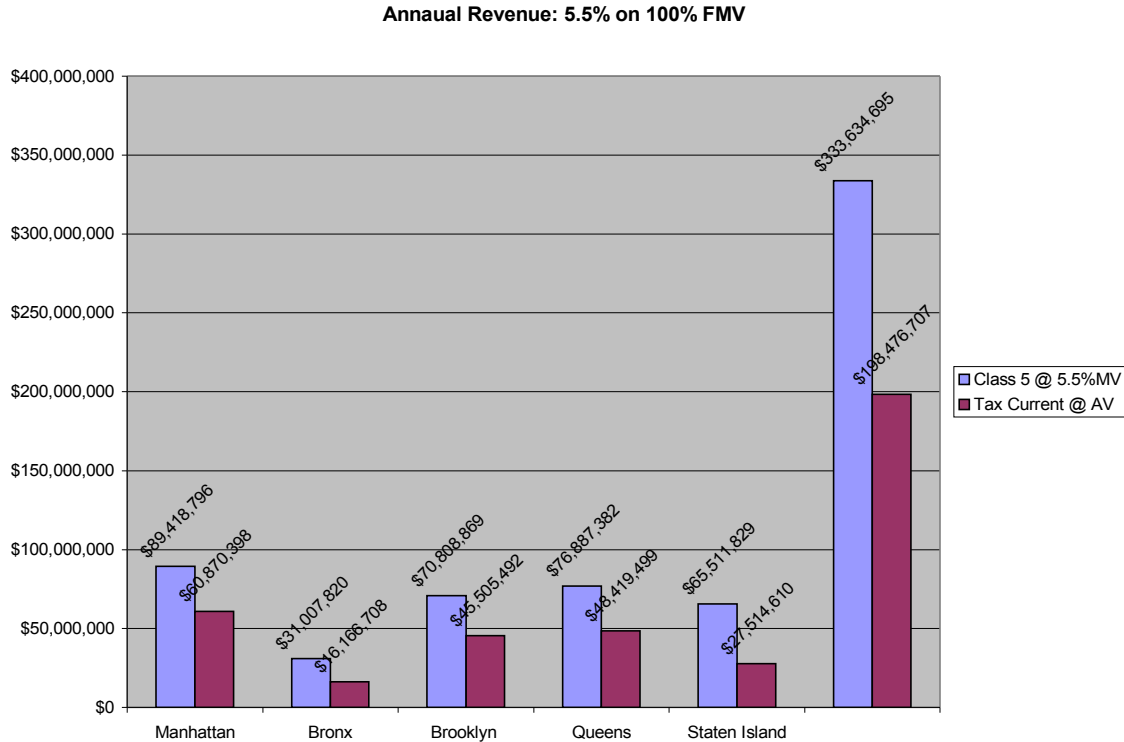


Figure 8- Prop A

A healthy annual revenue stream at a low tax rate would appear to be a good outcome for a new Class Five of Vacant Land.

Yet, there are causes for concern, which would appear to call for more study and more data:

1. As stated, Manhattan would come away with less of a revenue increase, simply because there is so little Class One value. The plurality of this revenue increase comes from Staten Island, because so much (65%) of vacant parcels are residential. Brooklyn and Queens would pay more, but more in line with Manhattan. The only obvious other outlier is the Bronx. In the light of a lack of construction in these two boroughs, CSE would want to move its inquiry along the lines of absentee-ownership. There is no linked

database that provides parcel address and mailing address. By establishing a standard database for research not only by CSE but government and neighborhoods, the effect of absentee ownership could be traced.

2. A serious effort to track ownership patterns with GIS mapping should be attempted. Because the geo-coding of the entire City's property databases are in their infancy, or unable to communicate with one another, it is presently impossible for CSE to run these numbers. A budget item created at Finance, Council or the Borough office might be an appropriate step for an in-house study.
3. CSE believes it is important to step up the frequency of physical meetings in New York City at the MBP's office to get a better sense of where it possible to go with this particular idea, as well as Proposal B, the LVT shift among the Four Classes. There is no end to the analysis possible, but we want to do what is needed by the MBP's office.
4. Outreach, especially to the Bronx and some areas of Brooklyn and Queens to highlight the fact that vacant land is a drain at the expense of working to low-income neighborhoods. How to deal with the reality of massive land banking in Staten Island must also be addressed.

Proposal B:

Introduction

The purpose of the second analysis is to determine the feasibility of a land value tax for New York City, NY in entirety. To conduct our analysis, we've used a recent cadastre (or real estate tax roll) that includes the essential information for such a study, including parcel IDs, tax classes, location, values, and exemptions. Along with additional information such as tax rates and budget revenues, we first examine conditions under the current property tax structure and then compare that to the conditions during a shift to a land value tax structure.

A Note Regarding the Data

The data supplied to CSE in April, 2007 was a copy of the 2007 cadastre as provided from the NYC Finance department. After reviewing the data set and comparing it with the NYC Finance Dept.'s "Tentative Assessment Role, Fiscal Year 2008" report, it became clear that some of the information may not reflect additional adjustments performed for tax purposes, including changing the number of taxable properties and calculating the actual billable values.²⁸ With that in mind, some of the following calculations will end up less accurate, although every effort was made to possible to prevent significant deviations. For those numbers identified as inaccurate, we've provided notes of our observations and comparisons with the finance report for clarification purposes.

²⁸http://www.nyc.gov/html/dof/html/pdf/07pdf/assessment_report_08.pdf

Property Tax Shift Analysis

The objective of a land value tax on real estate is to shift the revenue stream from buildings onto land as the tax base. Because the current property tax structure is so heavily weighed upon the building component as the main tax base, attempting to shift off it too rapidly would prevent the social and economic adjustments necessary to ease the transition.

Because of this, CSE has developed a “phase-in” program that provides gradual increases in the proportion of the property tax levied on land value along with subsequent reductions in the amount levied on building values. This is done in a “revenue neutral” manner that ensures the amount of overall tax revenue for the jurisdiction’s budget remain the same.

This approach, while stabilizing revenues, begins sending “signals” throughout the jurisdiction that trigger the adjustments in social and economic activity. Property owners that were planning on holding their land for further price capitalization from rising land values might reconsider this approach. The stimulation of these owners of speculative or idle land will pressure more properties back into the market to be sold or rented as tax liability on land values are expected to increase. An increase in the supply of available properties for more reasonable prices will also attract more buyers and developers willing to put the property back into productive use. This will help reverse blighted conditions and provide greater opportunities for affordable housing and commercial leases.

If the jurisdiction remains committed to the tax shift and continues phasing in new rates annually or bi-annually, within 5 to 10 years the property tax can be transformed into a full land value tax with a highly efficient real estate market and greater social equity as a result. Once the property tax is entirely based on land values, other taxes on labor and capital can be phased out in the same manner, with the rates on business, wage, and sales taxes being reduced and the tax rate on land being increased. Like the shift within the property tax, these changes will improve the dynamics of the local economy by encouraging productivity and ensuring equal opportunities.

Summary of the Current Tax Structure

Based on the 2008 Office of the Mayor’s Four Year Financial Plan, New York City’s property tax for 2009 will make up approximately 40% of annual municipal budget revenues, bringing in \$14,100,000,000.²⁹ Whereas most municipalities apply a uniform tax rate to all classes of property, the city instead applies a different tax rate upon each of four distinct classes of real estate: class 1 for small residential properties (single or multifamily homes), class 2 for large residential properties (apartments, condominiums, and cooperatives), class 3 for utility properties, and class 4 for commercial properties. Table 1 and Figure 9 provide a summary of the basic details of the city’s property tax by tax class.

²⁹http://home.nyc.gov/html/omb/pdf/fp10_07.pdf

Tax Class	Tax Rate	Billable Property Value ³⁰	Tax Revenue	% of Revenue
1	16.118%	\$12,796,699,159	\$2,062,571,970.45	14.42%
2	12.737%	\$45,151,081,019	\$5,750,893,189.39	40.21%
3	12.007%	\$631,343	\$75,805.35	0.00%
4	10.997%	\$58,998,916,271	\$6,488,110,822.32	45.37%
Totals		\$116,947,327,792.00	\$14,301,651,788	100.00%

Table 1: Fiscal year 2007 tax rates and revenues

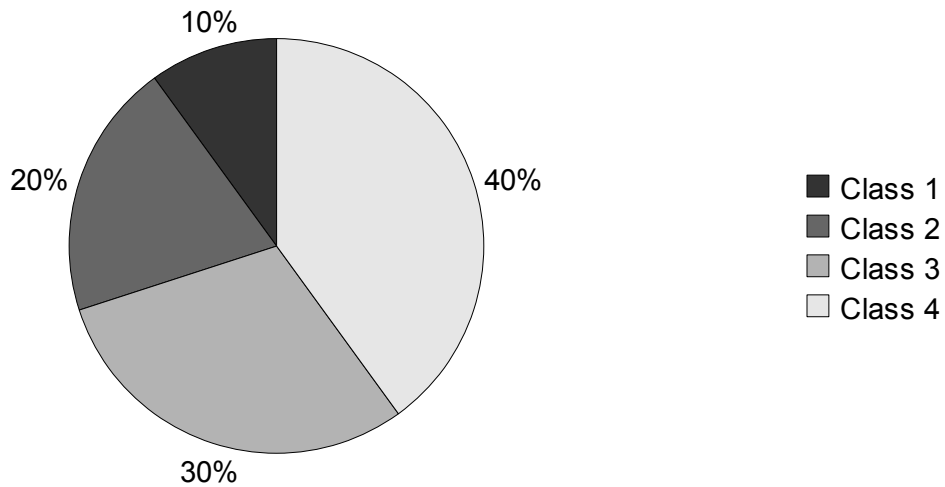


Figure 9: Fiscal year 2007 tax revenue by class

Because New York is composed of distinct boroughs, it is essential to review the revenue breakdown via borough values as well, as seen in Table 2 and Figure 10.

³⁰Aggregate values calculated from 2007 cadastre. When reviewed against the “assessed billable” values listed in the finance dept.’s report, the following variations between the two data sets were identified: class 1 remained within 1% accuracy, classes 2 and 4 reported ~11% lower total values, and class 3 reported 99% higher values (most class 3 values missing from CSE’s data).

Borough	# Properties	Property Value	Tax Revenue	% Total Revenue
Manhattan	127,132	\$76,916,179,442	\$9,028,287,606	63.13%
Bronx	105,941	\$6,047,375,930	\$766,833,411	5.36%
Brooklyn	307,874	\$13,546,167,640	\$1,776,229,790	12.42%
Queens	349,361	\$17,074,347,704	\$2,254,151,175	15.76%
Staten Island	135,216	\$3,363,257,076	\$476,149,805	3.33%
Total	1,025,524	\$116,947,327,792	\$14,301,651,788	100.00%

Table 2: Property values and tax revenue by borough

Manhattan brings in a large majority of the total tax revenue, yet each borough is roughly proportionate between property values and resulting tax revenues. This can be seen more clearly in Figure 10, showing the proportions of property value to tax revenue.

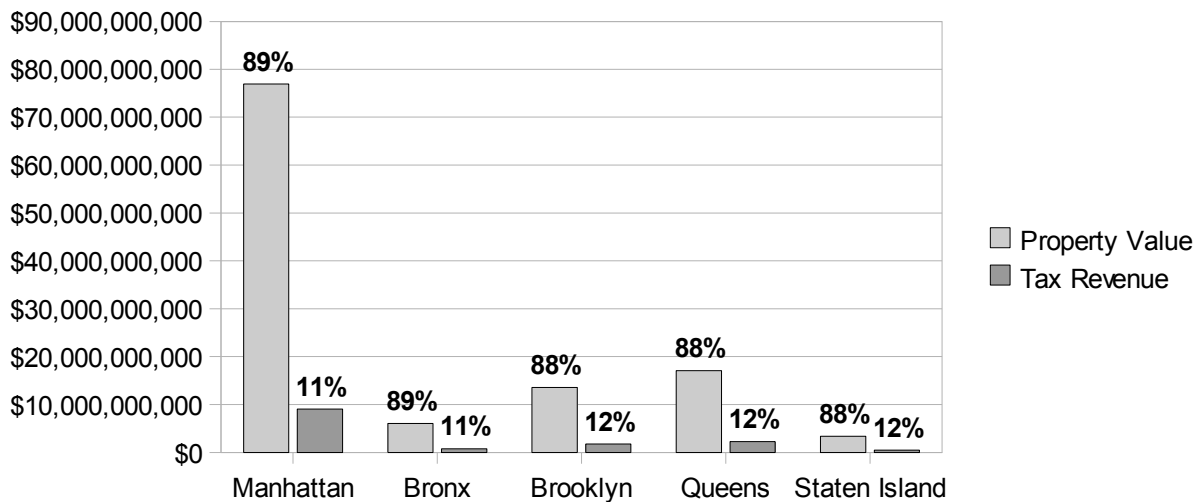


Figure 10: Property values and tax revenues by borough

According to our data, there are 1,025,524 taxable properties in the city.³¹ A breakdown of the property values in buildings, land, and total can be seen in Table 3 and Figure 11.

³¹This differs significantly from the 970,470 properties listed in the finance dept.'s report, which has 55,054 (or 6%) less properties. The reason for this is not clear.

Value	Total	Buildings	Land
Assessed property	\$188,892,188,612	\$122,418,922,569	\$66,473,266,043
Exempt property (\$)	\$71,944,860,820	\$45,547,976,627	\$26,396,884,193
Exempt property (%)	38.09%	37.21%	39.71%
Billable property (\$)	\$116,947,327,792	\$76,870,945,942	\$40,076,381,850
Billable property (%)	61.91%	62.79%	60.29%

Table 3: Aggregate property values

Take notice in Table 3 of the proportion of billable to exempt property. For many cities, a significant amount of property value is exempt. This can include government properties (including state and federal sites), open space, religious property and burial grounds, academic or medical campuses, and other types of significant land use. Although it is important to consider how much of the property can be kept off the tax rolls and utilize PILOT (payment in lieu of taxes) programs when possible, CSE has successfully helped other cities with similar proportions of exempt property shift to a land value tax even with a greatly reduced amount of taxable land.

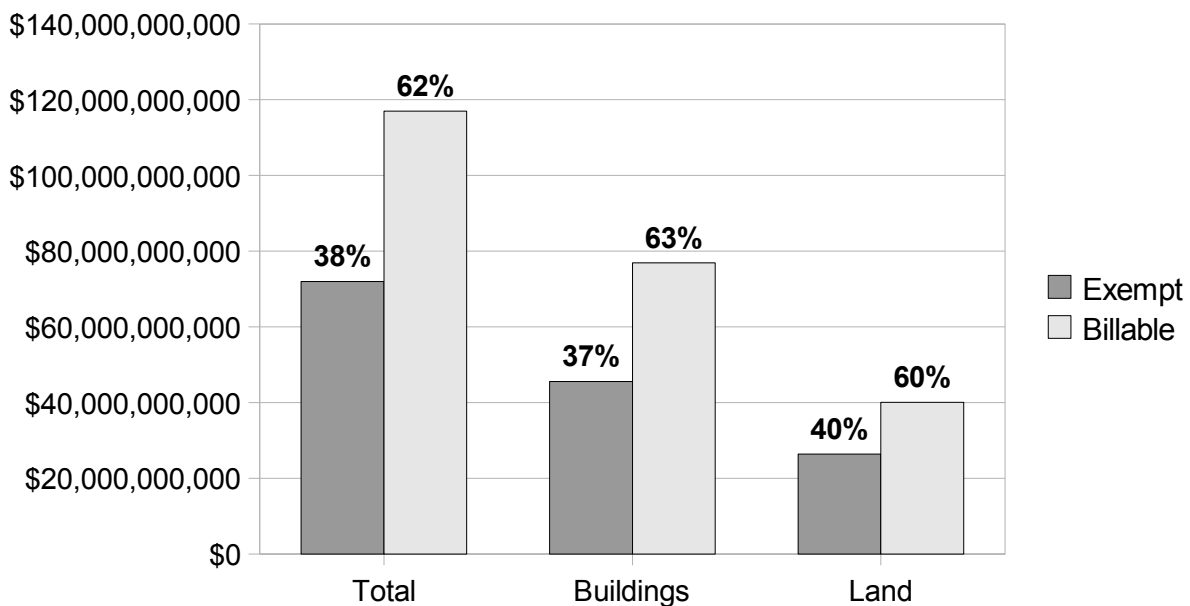


Figure 11: Aggregate exempt vs. billable property values

Potential for a Land Value Tax Structure

In order to conduct a land value tax shift, it is important to first determine if the jurisdiction's land value is a sufficient enough tax base to move toward. To do that, we look at the "building to land ratio" or B:L, which shows the proportion of assessed building value to land value. Along with determining the amount of land value available as a tax base and the appropriate land tax

rate, it also shows which properties will pay and which will save more on their individual tax bills. Tables 4 and 5 and Figures 12 and 13 show the ratios within these groups.

Tax Class	Building Value	Land Value	B:L
1	\$11,063,661,514	\$1,733,037,645	6.38
2	\$31,717,215,509	\$13,433,865,510	2.36
3	\$219,007	\$412,336	0.53
4	\$34,089,849,912	\$24,909,066,359	1.37
Total	\$76,870,945,942	\$40,076,381,850	1.92

Table 4: Tax class building to land ratios

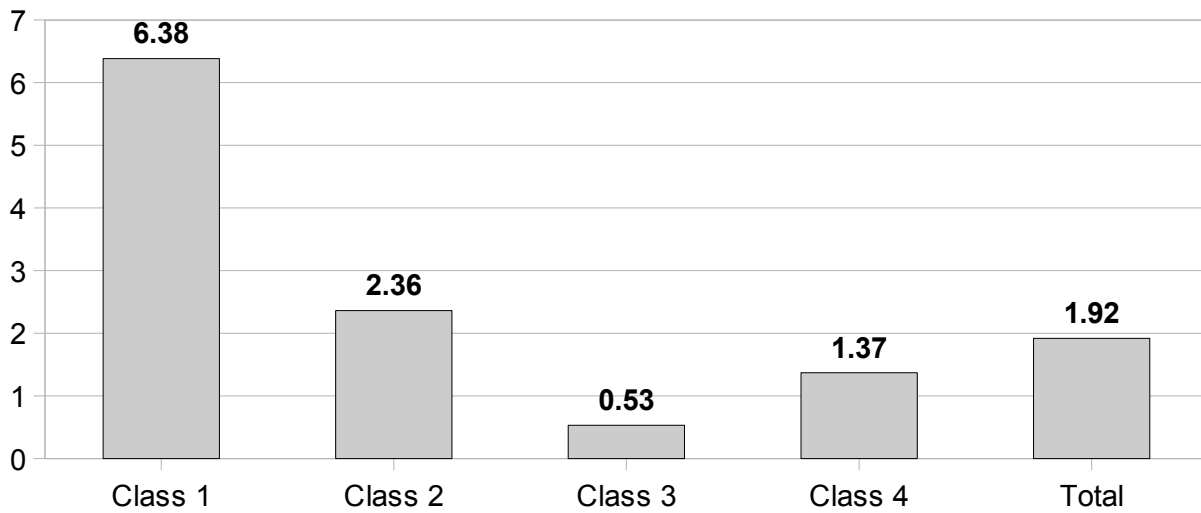


Figure 12: Tax class building to land ratios

Borough	Building Value	Land Value	B:L
Manhattan	\$46,941,511,820	\$29,974,667,622	1.57
Bronx	\$4,673,606,824	\$1,373,769,106	3.4
Brooklyn	\$10,297,143,132	\$3,249,024,508	3.17
Queens	\$12,539,346,528	\$4,535,001,176	2.77
Staten Island	\$2,419,337,638	\$943,919,438	2.56
Total	\$76,870,945,942	\$40,076,381,850	1.92

Table 5: Borough building to land ratios

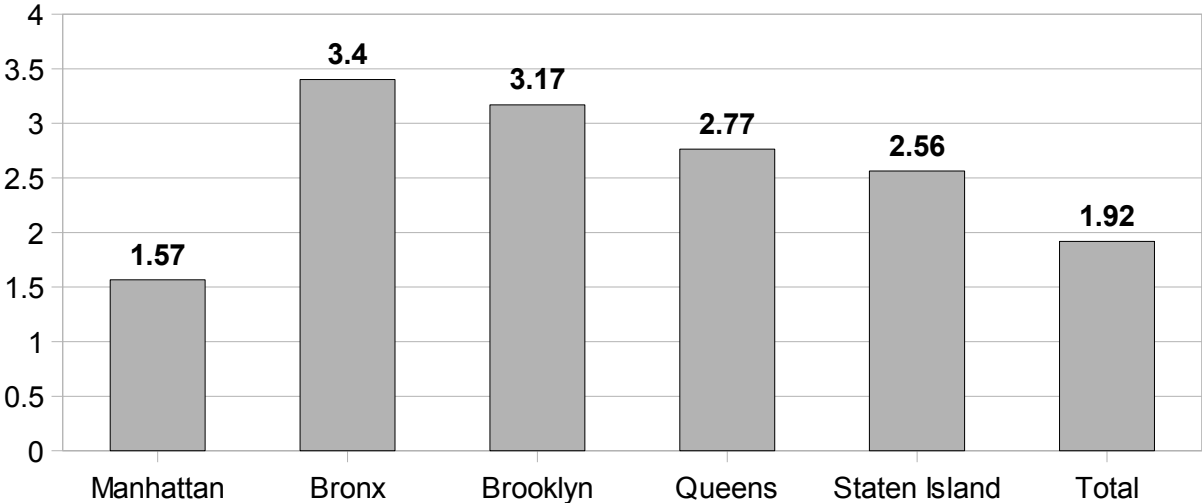


Figure 13: Borough building to land ratios

Based on the ratios, we expect to see—in general—that classes 1 and 2 benefit from LVT, and all “outer boroughs” benefit as well. Since the ratios are generally sufficient, we can now determine the tax rates needed to reduce the building tax rate, increase the land tax rate, and still remain revenue neutral. For the purposes of our study, we used the tax rates from 2006-2007 to remain aligned with the 2007 data. CSE generally recommends a building tax reduction of 20%, as any more would be too large and any less might not have the “stimulative” impact necessary as discussed above.

Table 6 presents the building and land tax rates under an LVT shift. The study includes the original rates and revenues again for comparison as Table 7.

Tax Class	Building Tax Rate	Land Tax Rate	Tax Revenue	% of Revenue
1	12.894%	36.697%	\$2,062,571,970	14.42%
2	10.190%	18.751%	\$5,750,893,189	40.21%
3	9.606%	13.282%	\$75,805	0.00%
4	8.798%	14.007%	\$6,488,110,822	45.37%
Totals			\$14,301,651,787	100%

Table 6: Building and land tax rates under an LVT structure

Tax Class	Property Tax Rate	Tax Revenue	% of Revenue
1	16.12%	\$2,062,571,970	14.42%
2	12.74%	\$5,750,893,189	40.21%
3	12.01%	\$75,805	0.00%
4	11.00%	\$6,488,110,822	45.37%
Totals		\$14,301,651,788	100%

Table 7: Property tax rates under the current structure

The shift in rates is the only thing that changes; revenue totals remain identical within each class and overall. To see the impact more clearly, let's compare the amounts levied on buildings and land both before and after the shift in Table 8 and Figure 14.

Class	Revenue From Buildings (\$)	Revenue From Buildings (%)	Revenue From Land (\$)	Revenue From Land (%)	Total Revenue
Current Property Tax Structure					
1	\$1,783,240,963	86%	\$279,331,008	14%	\$2,062,571,970
2	\$4,039,821,739	70%	\$1,711,071,450	30%	\$5,750,893,189
3	\$26,296	35%	\$49,509	65%	\$75,805
4	\$3,748,860,795	58%	\$2,739,250,027	42%	\$6,488,110,822
Proposed LVT Structure					
1	\$1,426,592,770	69%	\$635,979,200	31%	\$2,062,571,970
2	\$3,231,857,392	56%	\$2,519,035,798	44%	\$5,750,893,189
3	\$21,037	28%	\$54,768	72%	\$75,805
4	\$2,999,088,636	46%	\$3,489,022,186	54%	\$6,488,110,822

Table 8: Tax amounts levied under current and LVT structures

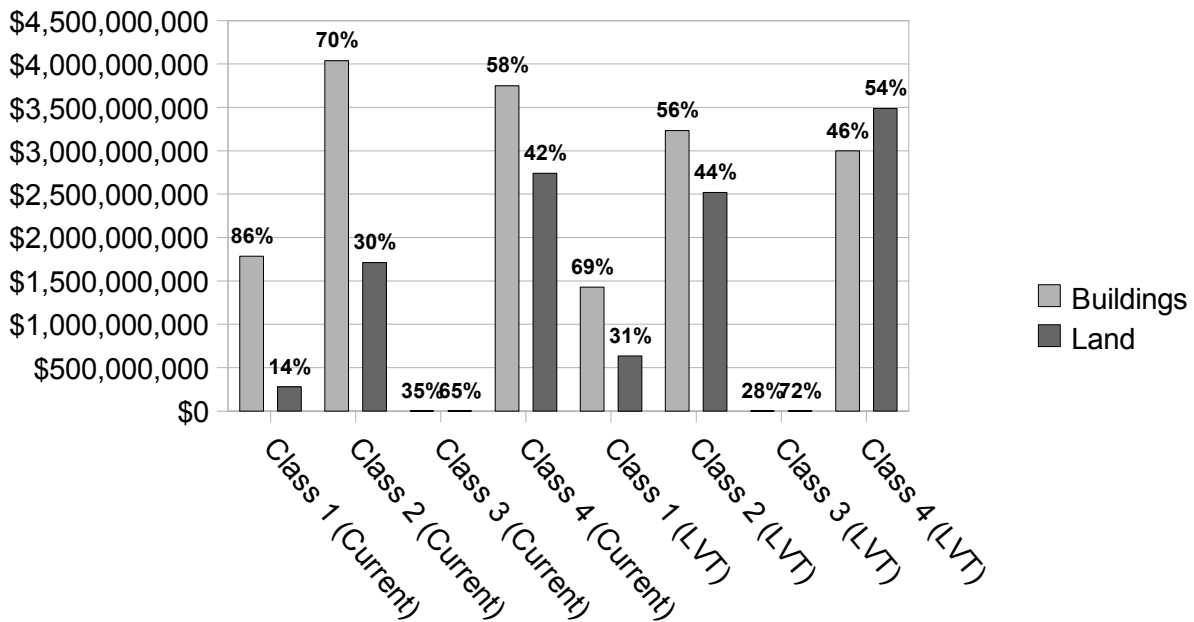


Figure 14: Tax levies on buildings and land, current vs. LVT

Because the revenue neutrality of the shift does not change tax incidence across each class as a whole, the real impact must be examined in the context of each borough, as listed in detail in Table 9. The results can be summarized as follows.

In total, the boroughs of Manhattan and Staten Island see a small increase in tax incidence after the tax shift. In Manhattan, we see an overall increase from \$9,028,287,606 to \$9,185,386,955, or 1.74%, with 7 out of 10 of the tax subclasses paying more. Staten Island's total taxes increase from \$476,149,805 to \$483,160,707, or 1.47%, with 5 of the 9 tax subclasses paying more. This minor increase should be able to be adapted to well, particularly in Manhattan, while Staten Island should make an effort to improve the productivity of its vacant land.

The Bronx, Brooklyn, and Queens all benefit from reduced tax incidence, with the Bronx doing particularly well by moving from \$766,833,411 to \$725,777,695, a savings of 5.35%; 7 of its 11 tax subclasses save more. Brooklyn also sees its total taxes reduced from \$1,776,229,790 to \$1,708,940,728, or 3.79%; half of its subclasses (5 out of 10) save. Finally, Queens gets some relief by moving from \$2,254,151,175 to \$2,198,385,700, or a 2.47% savings, even though only 5 of the 11 tax subclasses actually save in total.

Tax Class	Property Tax Revenue	% Total Revenue	LVT Revenue	% Total Revenue	Revenue Difference (\$)	Revenue Difference (%)
Manhattan						
1	\$88,516,385	0.62%	\$120,865,741	0.85%	\$32,349,356	136.55%
1A	\$100,076	0.00%	\$146,454	0.00%	\$46,378	146.34%
1B	\$337,718	0.00%	\$676,968	0.00%	\$339,249	200.45%
1C	\$774,605	0.01%	\$1,377,907	0.01%	\$603,302	177.88%
2	\$3,683,743,316	25.76%	\$3,801,966,496	26.58%	\$118,223,180	103.21%
2A	\$74,908,663	0.52%	\$80,366,833	0.56%	\$5,458,169	107.29%
2B	\$140,950,899	0.99%	\$139,996,189	0.98%	-\$954,711	99.32%
2C	\$62,824,997	0.44%	\$70,067,846	0.49%	\$7,242,849	111.53%
3	\$0	0.00%	\$0	0.00%	\$0	0.00%
4	\$4,976,130,942	34.79%	\$4,969,922,520	34.75%	-\$6,208,422	99.88%
Bronx						
1	\$167,115,689	1.17%	\$166,416,421	1.16%	-\$699,268	99.58%
1A	\$1,132,871	0.01%	\$1,518,000	0.01%	\$385,129	134.00%
1B	\$2,166,068	0.02%	\$4,655,595	0.03%	\$2,489,528	214.93%
1C	\$640	0.00%	\$1,457	0.00%	\$817	227.68%
1D	\$1,170,584	0.01%	\$1,295,363	0.01%	\$124,779	110.66%
2	\$318,338,999	2.23%	\$282,479,659	1.98%	-\$35,859,341	88.74%
2A	\$19,675,150	0.14%	\$17,946,609	0.13%	-\$1,728,541	91.21%
2B	\$7,796,114	0.05%	\$7,183,525	0.05%	-\$612,589	92.14%
2C	\$338,499	0.00%	\$317,695	0.00%	-\$20,804	93.85%

Tax Class	Property Tax Revenue	% Total Revenue	LVT Revenue	% Total Revenue	Revenue Difference (\$)	Revenue Difference (%)
3	\$0	0.00%	\$0	0.00%	\$0	0.00%
4	\$249,098,796	1.74%	\$243,963,372	1.71%	-\$5,135,424	97.94%
Brooklyn						
1	\$595,616,561	4.16%	\$576,326,058	4.03%	-\$19,290,503	96.76%
1A	\$5,632,758	0.04%	\$6,627,028	0.05%	\$994,270	117.65%
1B	\$4,319,254	0.03%	\$8,756,498	0.06%	\$4,437,244	202.73%
1C	\$1,029,927	0.01%	\$1,236,614	0.01%	\$206,687	120.07%
2	\$483,830,413	3.38%	\$453,054,447	3.17%	-\$30,775,965	93.64%
2A	\$131,450,048	0.92%	\$117,912,390	0.82%	-\$13,537,658	89.70%
2B	\$53,618,529	0.37%	\$48,702,513	0.34%	-\$4,916,017	90.83%
2C	\$17,924,346	0.13%	\$18,159,321	0.13%	\$234,976	101.31%
3	\$33,537	0.00%	\$35,813	0.00%	\$2,276	106.79%
4	\$482,774,419	3.38%	\$478,130,048	3.34%	-\$4,644,371	99.04%
Queens						
1	\$856,263,679	5.99%	\$825,612,361	5.77%	-\$30,651,318	96.42%
1A	\$9,456,135	0.07%	\$10,278,505	0.07%	\$822,370	108.70%
1B	\$6,312,508	0.04%	\$11,120,595	0.08%	\$4,808,087	176.17%
1C	\$4,890	0.00%	\$5,621	0.00%	\$731	114.95%
1D	\$3,164,522	0.02%	\$4,898,172	0.03%	\$1,733,650	154.78%
2	\$625,207,762	4.37%	\$589,698,520	4.12%	-\$35,509,243	94.32%
2A	\$77,311,880	0.54%	\$72,063,036	0.50%	-\$5,248,844	93.21%
2B	\$16,751,295	0.12%	\$16,247,340	0.11%	-\$503,956	96.99%
2C	\$1,138,459	0.01%	\$1,182,135	0.01%	\$43,676	103.84%
3	\$19,250	0.00%	\$17,276	0.00%	-\$1,974	89.75%
4	\$658,520,794	4.60%	\$667,262,139	4.67%	\$8,741,346	101.33%
Staten Island						
1	\$302,807,844	2.12%	\$295,429,536	2.07%	-\$7,378,307.45	97.56%
1A	\$9,974,060	0.07%	\$10,403,101	0.07%	\$429,040.55	104.30%
1B	\$6,675,196	0.05%	\$14,923,975	0.10%	\$8,248,779.33	223.57%
2	\$28,790,925	0.20%	\$27,462,508	0.19%	-\$1,328,417.77	95.39%
2A	\$4,886,702	0.03%	\$4,614,835	0.03%	-\$271,866.93	94.44%
2B	\$1,379,166	0.01%	\$1,440,276	0.01%	\$61,110.65	104.43%

Tax Class	Property Tax Revenue	% Total Revenue	LVT Revenue	% Total Revenue	Revenue Difference (\$)	Revenue Difference (%)
2C	\$27,023	0.00%	\$31,017	0.00%	\$3,994.14	114.78%
3	\$23,017	0.00%	\$22,716	0.00%	-\$302	98.69%
4	\$121,585,872	0.85%	\$128,832,744	0.90%	\$7,246,872	105.96%

Table 9: Tax shift results in comparison to current revenue

Conclusions and Recommendations

In summary, CSE feels LVT will have an overall positive impact across New York City, with substantial reductions across a majority of boroughs and tax subclasses. Such a shift will help stimulate unproductive land use, stabilize public revenue, and help keep the city’s world class economy competitive in a period of economic slowdown. Additionally, an LVT will act as a “value capture” for the city’s extensive public services and infrastructure, and can even help that value be reinvested into essential public goods such as affordable housing and transit service.

To move forward, CSE recommends further examination with more accurate data, along with efforts to explore the requirements to develop support within city council and administration. With the most current and complete data, including deed information such as sale prices and full owner addresses, we can identify the impact of the tax down to every individual property, which should show an even more progressive distribution of tax incidence and foster broad support for its adoption.

All the data used during research will be available for further examination, and we encourage further questions once the office completes its review. CSE appreciates the opportunity to provide its services, and remains optimistic about the potential for land value taxation in the City of New York.

Appendices

Appendix 1:

Types of Property

PROPERTY DESCRIPTIVE INFORMATION

This section contains the descriptive data for the property.

AV-TAX-CLASS Length 2 Character

VALID VALUES -

TAX CLASS 1 = 1-3 UNIT RESIDENCES

TAX CLASS 1A = 1-3 STORY CONDOMINIUMS

ORIGINALLY A CONDO

TAX CLASS 1B = RESIDENTIAL VACANT LAND

TAX CLASS 1C = 1-3 UNIT CONDOMINIUMS

ORIGINALLY TAX CLASS 1

TAX CLASS 1D = SELECT BUNGALOW COLONIES

TAX CLASS 2 = APARTMENTS

TAX CLASS 2A = APARTMENTS WITH 4-6 UNITS

TAX CLASS 2B = APARTMENTS WITH 7-10 UNITS

TAX CLASS 2C = COOPS/CONDOS WITH 2-10 UNITS

TAX CLASS 3 = UTILITIES (EXCEPT CEILING RR)

TAX CLASS 4A = UTILITIES - CEILING RAILROADS

TAX CLASS 4 = ALL OTHERS

Appendix 2: Alternative Rates for a tax on vacant land (class Five)

Percentage/Revenue Changes				
Vacant and Underused* Land: A New Class of Real Estate for Purposes of Taxation				
Borough	Class 5 @ 5.5%MV	Tax Current @ AV	Percent Difference	Dollar Difference
Manhattan	\$89,418,796	\$60,870,398	46.90%	\$28,548,398
Bronx	\$31,007,820	\$16,166,708	91.80%	\$14,841,111
Brooklyn	\$70,808,869	\$45,505,492	55.61%	\$25,303,378
Queens	\$76,887,382	\$48,419,499	58.79%	\$28,467,882
Staten Island	\$65,511,829	\$27,514,610	138.10%	\$37,997,219
	\$333,634,695	\$198,476,707	68.10%	\$135,157,988
Borough	Class 5 @ 5%MV	Tax Current @ AV	Percent Difference	Dollar Difference
Manhattan	\$81,289,815	\$60,870,398	33.55%	\$20,419,417
Bronx	\$28,188,927	\$16,166,708	74.36%	\$12,022,218
Brooklyn	\$64,371,699	\$45,505,492	41.46%	\$18,866,208
Queens	\$69,897,620	\$48,419,499	44.36%	\$21,478,121
Staten Island	\$59,556,208	\$27,514,610	116.45%	\$32,041,598

	\$303,304,269	\$198,476,707	52.82%	\$104,827,562
				\$0
	Class 5 @ 4.75%MV	Tax Current @ AV	Percent Difference	Dollar Difference
Borough	\$77,225,324	\$60,870,398	26.87%	\$16,354,926
Manhattan	\$26,779,481	\$16,166,708	65.65%	\$10,612,772
Bronx	\$61,153,114	\$45,505,492	34.39%	\$15,647,623
Brooklyn	\$66,402,739	\$48,419,499	37.14%	\$17,983,240
Queens	\$56,578,398	\$27,514,610	105.63%	\$29,063,788
Staten Island	\$288,139,055	\$198,476,707	45.18%	\$89,662,348
Borough	Class 5 @ 4.50%MV	Tax Current @ AV	Percent Difference	Dollar Difference
Manhattan	\$73,160,833	\$60,870,398	20.19%	\$12,290,435
Bronx	\$25,370,034	\$16,166,708	56.93%	\$9,203,326
Brooklyn	\$57,934,529	\$45,505,492	27.31%	\$12,429,038
Queens	\$62,907,858	\$48,419,499	29.92%	\$14,488,359
Staten Island	\$53,600,587	\$27,514,610	94.81%	\$26,085,978
	\$272,973,842	\$198,476,707	37.53%	\$74,497,135
Borough	Class 5 @ 4.25%MV	Tax Current @ AV	Percent Difference	Dollar Difference
Manhattan	\$69,096,343	\$60,870,398	13.51%	\$8,225,944
Bronx	\$23,960,588	\$16,166,708	48.21%	\$7,793,879
Brooklyn	\$54,715,944	\$45,505,492	20.24%	\$9,210,453
Queens	\$59,412,977	\$48,419,499	22.70%	\$10,993,478
Staten Island	\$50,622,777	\$27,514,610	83.99%	\$23,108,167
	\$257,808,628	\$198,476,707	29.89%	\$59,331,921
Borough	Class 5 @ 4%MV	Tax Current @ AV	Percent Difference	Dollar Difference
Manhattan	\$65,031,852	\$60,870,398	6.84%	\$4,161,454
Bronx	\$22,551,142	\$16,166,708	39.49%	\$6,384,433
Brooklyn	\$51,497,359	\$45,505,492	13.17%	\$5,991,868
Queens	\$55,918,096	\$48,419,499	15.49%	\$7,498,597
Staten Island	\$47,644,966	\$27,514,610	73.16%	\$20,130,357
	\$242,643,415	\$198,476,707	22.25%	\$44,166,708
Borough	Class 5 @ 3.75% MV	Tax Current @ AV	Percent Difference	Dollar Difference
Manhattan	\$60,967,361	\$60,870,398	0.16%	\$96,963
Bronx	\$21,141,695	\$16,166,708	30.77%	\$4,974,987
Brooklyn	\$48,278,774	\$45,505,492	6.09%	\$2,773,283
Queens	\$52,423,215	\$48,419,499	8.27%	\$4,003,716
Staten Island	\$44,667,156	\$27,514,610	62.34%	\$17,152,546
	\$227,478,201	\$198,476,707	14.61%	\$29,001,494

Borough	Class 5 @ 3.5% MV	Tax Current @ AV	Percent Difference	Dollar Difference
Manhattan	\$56,902,870	\$60,870,398	-6.52%	-\$3,967,528
Bronx	\$19,732,249	\$16,166,708	22.05%	\$3,565,540
Brooklyn	\$45,060,190	\$45,505,492	-0.98%	-\$445,302
Queens	\$48,928,334	\$48,419,499	1.05%	\$508,835
Staten Island	\$41,689,346	\$27,514,610	51.52%	\$14,174,736
	\$212,312,988	\$198,476,707	6.97%	\$13,836,281