

"Only the little people pay taxes": Reforming New York City's Property Tax Structure to Mitigate Inequality and Increase Efficiency

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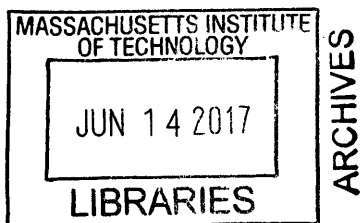
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Abstract

Across the U.S., property tax rates for rental buildings average 1.4 times higher than rates for homeownership properties. In New York City, the spread is 6.4 times. In a city where more than 50% of residents are rent-burdened, the Rent Guidelines Board estimates that fully 1/3 of rents are actually just passed-through property taxes. With both the Mayor and the Governor prioritizing housing affordability, reforming the property tax structure to better serve the City's millions of struggling renters should be a priority.

This research examines how the existing property tax structure came to rule New York City, and explores its spatial outcomes across the five boroughs. Using data scraped from the 2015 property tax bills of every parcel in the City, this investigation finds that the Department of Finance deviates significantly from its publicized process when calculating tax bills, and moreover, that property taxes are poorly correlated with land, market, and assessed values.

This study also investigates options for reform, and finds that while there is no 'silver bullet', there are a number of steps the City could take to mitigate some of the system's inequities and inefficiencies. These include instituting a single tax rate system applied to assessed values; a two tax class system based on full market values; and/or an increased tax on high-priced units. Lastly, this examination finds that any move towards a more functional system will require broad-based support from grassroots to grassstops. The final chapter outlines a rough framework for building such a movement.

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I. Introduction & Context

When Mayor Bill de Blasio announced his administration's Housing New York plan in April of 2014, it was widely heralded as the most ambitious housing agenda ever set forth by a U.S. city. The proposal aims to build or preserve more than 200,000 units of affordable housing across the five boroughs over the next ten years. This is an important goal in a City where more than 50% of households are currently rent-burdened, and nearly a third are paying more than half of their income toward housing.

Unfortunately though, claims abound that the plan sets income limits too high and will further hasten displacement among the City's most vulnerable citizens. Although some new affordable housing is better than none, the Mayor's plan fails to address several key structural issues that have contributed to the affordability crisis. One such issue that is frequently cited as privileging homeowners over renters, even to the point of impacting development decisions, is the structure of the current property tax system. This research confirms the finding that renters in New York City today are taxed at 6.4 times the rate of homeowners (compared to an average of 1.4 times nationwide). Homeownership properties comprise 46% of the estimated market value across the City, while paying just 15% of the total property tax burden. Conversely, rental properties make up 24% of the Citywide market value, but pay 37% of the property tax. The Housing New York plan states:

"We will revise the terms of our existing subsidy programs, and better align tax exemptions and other incentive programs to ensure that City resources leverage the maximum amount possible from other sources, are no greater than absolutely necessary to incentivize the production of housing, and promote production of units for New York's neediest families" (10)ⁱ.

Revising tax exemptions and incentives will not be enough though, given the skew in rates created by the design of the taxation process itself. If the administration is interested in increasing the amount of affordable rental units, then reforming this system that places such an outsize tax burden on the shoulders of City renters should be at the top of their to-do list.

New York City in Context

New York City is both the most populous city in the U.S., and the densest. Located on the eastern coast of the country at the southern tip of New York State, it is comprised of five boroughs, each of which is a separate county with unique characteristics and demographics. The New York City government serves 8.5 million residents, supports more than 4 million jobs (nearly 1 million of which are held by commuters), and has a larger budget than any other jurisdiction in the U.S. save for the states of California, Texas, Florida, and obviously New York. Taxes finance more than two-thirds of this budget. Funds gathered from the property tax alone comprise nearly 30% of the City's multi-billion dollar municipal revenues.

This number is only growing. According to the 'Annual Report of the New York City Property Tax: Fiscal Year 2016', the City's total market value of fully and partially taxable property increased again in fiscal year 2016 to \$969.4 billion, which is 7% larger than the same figure for fiscal year 2015. This is the fifth straight year that the City has experienced such an increaseⁱⁱ.

Unfortunately, for such a significant source of revenue, there is little oversight of the many facets of the property tax system. A report by Assemblymember Dan Quart's office notes that, "Exemptions are awarded based on ability to organize and lobby the state

legislature, not because they are sound tax policy” (5)ⁱⁱⁱ, and the Fiscal Policy Institute writes that “No entity within the City of New York prepares an overall analysis of who pays New York City taxes” (35)^{iv}. Similarly, a report by Real Estate Forefront on New York City’s property tax states, “The one general finding for all the properties surveyed was that property tax collections did not appear to show much correlation to the age of the building, location, size or overall value – except for single family homes” (7)^v. This distortion is inefficient for a City facing stark wealth disparities and what the New York Times recently called a “surge in homelessness” (1)^{vi}. Figure 1 below illustrates the differences in median household incomes across different block groups. The spread between wealthiest and poorest is more than \$100,000.

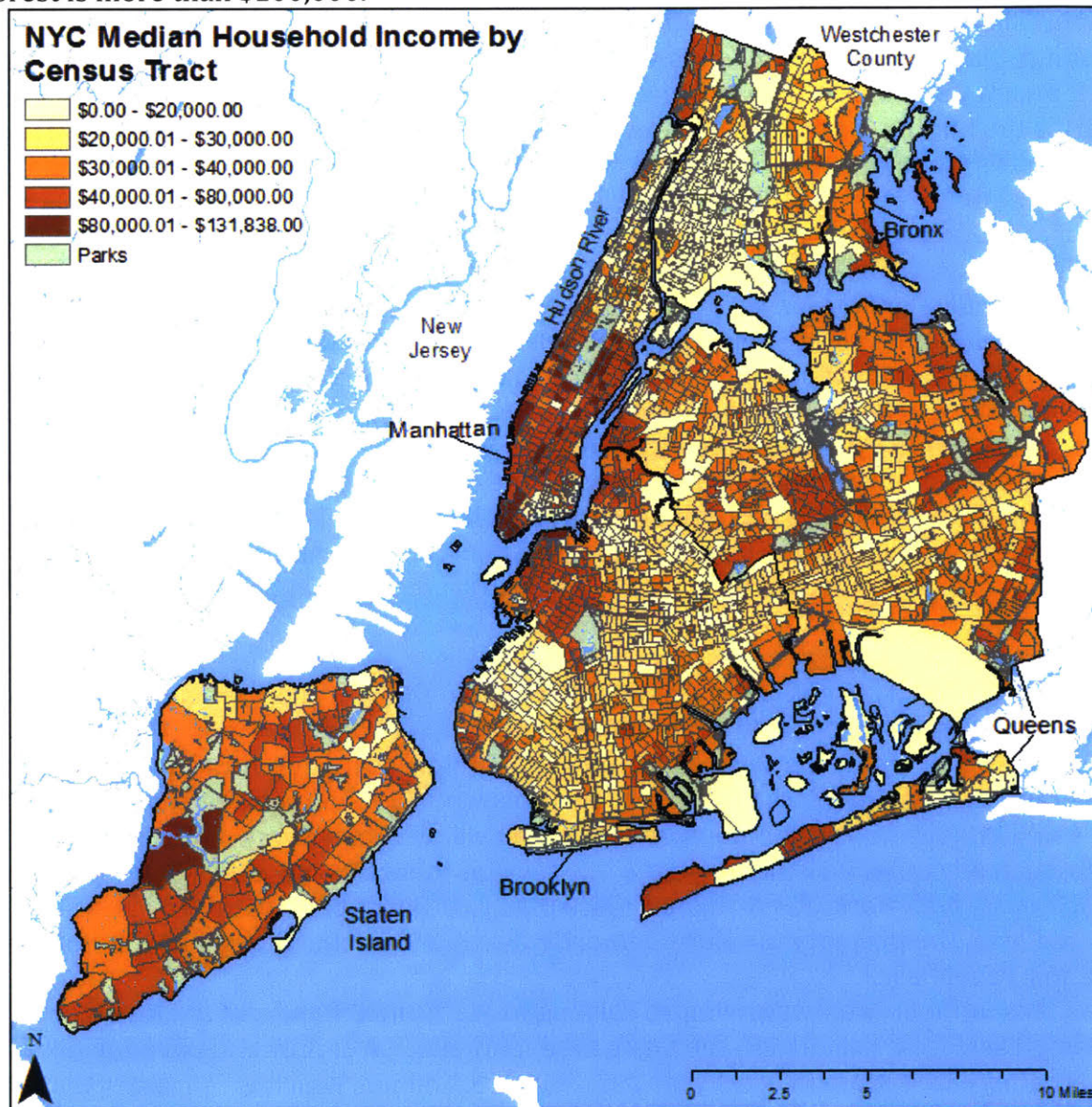


Figure 1. Map of New York City Census Tracts Symbolized by Median Household Income

This variation is not limited merely to household income though; differences in race, wealth, age, etc. abound both across and within the boroughs. For instance, Manhattan is the smallest borough but perhaps the most well-known. It is home to such world-famous

landmarks as Times Square, the Empire State Building, Wall Street, and Central Park. Additionally, it is often cited as a global center of commerce and diplomacy, boasting the headquarters of many companies and the United Nations. In total, more than 1.6 million people live in Manhattan, approximately half of whom identify as non-Hispanic White. Roughly one quarter of the population identifies as Hispanic or Latino of any race, while 18% of borough residents are Black or African-American, and 12% are Asian or Asian-American. The median age is 36 years with 17% of the population under 18, 10% aged 18-24, 38% aged 25-44, 23% aged 45-64, and 12% aged 65+. Manhattan is one of the highest-income places in the United States (of municipalities with more than one million residents), in addition to having the highest cost of living and the deepest level of income inequality. The median non-family income in Manhattan is \$64,250; for families it is \$89,291. The average price per square foot for residential real estate in Manhattan is \$1,759.

Brooklyn is the most populous borough with more than 2.6 million residents. It boasts such landmarks as Prospect Park, the Barclay's Center, and Coney Island. Recently, it has also become somewhat of an entrepreneurship hub after a number of high technology startups have located there. The borough's racial composition is 36% non-Hispanic White, 20% Hispanic or Latino, 32% Black or African-American, and 11% Asian or Asian-American. The median age is 33 years with 27% of the population under the age of 18, 10% aged 18-24, 31% aged 25-44, 21% aged 45-64, and 12% over the age of 65. The median non-family income in Brooklyn is \$35,778; for families it is \$53,808. The average price per square foot for residential real estate in Brooklyn is \$687.

Queens is the largest borough in New York City and it is also the easternmost part of the City geographically. It is the second most populous borough after Brooklyn, with 2.3 million residents. Queens has been named one of the most ethnically diverse urban areas in the world, and it also has the most diversified economy of the five boroughs. Both of New York City's airports, JFK International and Laguardia Airport, are located in Queens, making the airspace above this borough the most congested in the entire U.S. Nearly 49% of Queens residents are foreign-born, with the largest proportion hailing from Latin America, followed by Asia, Europe, and Africa, in that order. Racially, 33% of the population identifies as non-Hispanic White, 25% as Hispanic or Latino, 19% as Black or African-American, and 18% as Asian or Asian-American. The median age is 35 years with 23% of the population under the age of 18, 10% aged 18-24, 33% aged 25-44, 22% aged 45-64, and 13% over the age of 65. The median non-family income is \$21,919; for families it is \$38,517. The average price per square foot for residential real estate in Queens is \$478.

The Bronx is the northernmost of the five boroughs, and has a population of 1.4 million people. Approximately one-quarter of the Bronx is comprised of open space, including cemeteries, parks, the New York Botanical Garden, and the Bronx Zoo. The racial composition of Bronx residents is as follows: 15% non-Hispanic White, 48% Hispanic or Latino, 30% Black or African-American, and 3% Asian or Asian-American. The median age is 31 years with 31% of the population under the age of 18, 11% aged 18-24, 31% aged 25-44, 19% aged 45-64, and 10% over the age of 65. The median non-family income is \$21,919; for families it is \$38,517. The average price per square foot for residential real estate in the Bronx is \$268.

Staten Island is the southernmost New York City borough. It has a population of just 475,000 people despite being the third-largest borough by overall size. Approximately 20% of Staten Island's population is foreign-born. The racial composition is 66% non-Hispanic

White, 16% Hispanic or Latino, 10% Black or African-American, and 7.4% Asian or Asian-American. The median age is 37 years, with 23% of the population under age 18, and 15% over the age of 65. The median non-family income is \$36,456; for families it is \$85,788. The average price per square foot of residential real estate in Staten Island is \$353^{viiiviii}.

Borough	Population	% Non-White	Median Age	Med. HH Income	Avg. Price PSF
<i>Manhattan</i>	1.6 million	52%	36	\$72,871	\$1,759
<i>Brooklyn</i>	2.6 million	64%	33	\$48,201	\$687
<i>Queens</i>	2.3 million	67%	35	\$57,720	\$478
<i>Bronx</i>	1.4 million	85%	31	\$34,299	\$268
<i>Staten Island</i>	475,000	34%	37	\$73,197	\$353

Figure 2. Comparison Table of New York City Borough Demographics & Prices

How the Property Tax System Works Today

Despite the differences between the boroughs highlighted above, all five are subject to the same system of property taxation as part of the City of New York. Under the current structure, every parcel in the five boroughs is categorized into one of four tax Classes based on property type. These four Classes are each treated differently for taxation purposes. A property’s tax Class determines the way its market value is estimated, what percentage of that value is considered taxable (assessed value), what abatements and exemptions it qualifies for, and its tax rate as assigned yearly based on the City’s budget needs. The Class breakdown is as follows:

- **Class 1:** 1-3 family homes and condominiums of 3 stories or fewer
- **Class 2:** all other residential property not included in Class 1
 - **Sub-Class 2a:** 4-6 unit rental buildings
 - **Sub-Class 2b:** 7-10 unit rental buildings
 - **Sub-Class 2c:** 2-10 unit cooperative or condominium buildings
(General Class 2 properties must have 11 units or more)
- **Class 3:** utility properties
- **Class 4:** commercial and industrial properties and others not included above

In order to calculate tax bills for each of these Classes, the Department of Finance (DOF) follows the process enumerated below:

1. Estimate the property’s market value
2. Multiply market value by an assessment ratio to determine assessed value
3. Subtract any tax exemptions the property qualifies for to reduce assessed value
4. Multiply the resultant number by the appropriate Class tax rate for that year
5. Subtract abatements as necessary

This analysis will be focused almost entirely on residential properties, i.e. Classes 1 and 2. Accordingly, Figure 3 below summarizes the Class-wide values for these two groups for Steps 1, 3, and 4 above, including the tax rates for 2015.

Class	Market Valuation Process	Assessment Ratio	Tax Rate	% of Market Value
1	Based on recent sales data	6%	19.157%	68.521%
2	Based on operating income	45%	12.855%	31.479%
3	Land value+cost of building	45%	11.125%	0.0004133%
4	Based on annual revenue	45%	10.684%	61.006%

Figure 3. Market Valuation Process, Assessment Ratios, 2015 Tax Rates & Percentage of Total Citywide Property Value

This may seem relatively straightforward, despite its many steps, however there are several ‘catches’. For instance, buildings such as those in Sub-Class 2c are often not rental properties, but in fact luxury condos. Thus, in order to follow the Class 2 process of estimating market value based on operating income, tax assessors effectively invent a rental income value for the building. In order to do this, they look to the incomes of nearby buildings. Many of these buildings contain units subject to rent control though, which results in deep undervaluations of high-end condos.

Another producer of skew in favor of owners is the Cooperative and Condominium Tax Abatement. Originally designed to bring the taxation of co-ops and condos more in line with Class 1 properties, this program has recently come under fire for decreasing tax rates on these pricey units even below those of single-family homes, and forcing rental properties to pay more than their fair share of the Class 2 tax burden.

Research Overview

Although numerous attempts have been made to systematically revise the City’s tax structure, its inherent complexity combined with conflicting political priorities has repeatedly gridlocked policy negotiations. While the current structure made sense under conditions in the early 1980s when the City needed to incentivize development, New York no longer has to pander to entice real estate investors. The government also should not choose to pander solely to homeowners in a City where 70% of residents rent. A report by the Center for Research, Regional Education and Outreach at the State University of New Paltz found that “All changes adopted by the State Legislature to Articles 18 and 19 of the Real Property Tax Law since 1981 have sought to constrain property tax increases for homeowners” (6)^{ix}. Given the sweeping unaffordability across the City and the projected excess of 9,400 luxury units by 2017, the current structure is serving few markets well, leaving in its wake a city inaccessible to all but the super-rich. The undersupply of profit and tax-generating middle-income housing in the face of oversaturation of the luxury market underscores the need for reform. Figure 4 below speaks to this issue, as more than one-quarter of all of New York City’s rental units are unaffordable to even those households making 120% of the Area Median Income (AMI)^x.

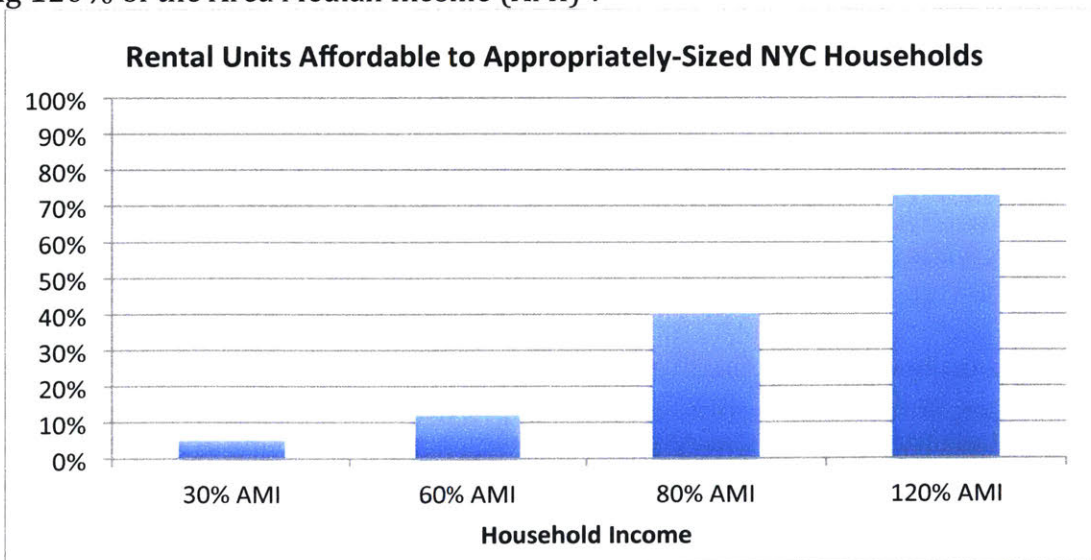


Figure 4. *Percentage of Appropriately-Sized Rental Units Affordable to NYC Households of Varying Income Levels as Measured by Percentage of Area Median Income (AMI)*

Compounding these challenges is the fact that while research has been done to expose the myriad problems built into the City's property tax system, there is a relative dearth of research on how to fix it. The majority of the investigations into this subject corroborate the aforementioned conclusions that the current structure is overly cumbersome, generally ineffective, and perpetuates income inequalities across the boroughs.

With the recent discussion prompted by the contentious lapse of the 421-a program, which awards ten years of property tax breaks to multi-unit residential construction projects, the City has an opportunity to broaden the conversation to include the entirety of the tax structure. Furthermore, 2016 marked the thirtieth anniversary of the Tax Reform Act of 1986, which means that within a few short years thousands of tax credit units across the City will start exiting income restrictions and become eligible for conversion to market rate. Given these circumstances, it is imperative that the State and City administrations come together to chart a more functional way forward. A report by the Citizens Budget Commission notes that at this critical time in the City's history, the property tax is an especially important area for potential reform due to the fact that it is the City's largest tax revenue generator, but is also both unequal and inefficient. They state that given the key policies up for renewal now and in the coming years, "The moment should not be wasted as an opportunity to make the system more transparent and equitable" (1)^{xi}.

This research uses spatial analysis tools to explore the impact of the current property tax system on New York City residents and neighborhoods, and subsequently examines options for reform. The investigation begins by surveying the history of the property tax structure and concludes with an attempt at identifying viable alternatives to the existing arrangement based on recommendations from the literature as well as policies that have been successful in cities with comparable demographics. The ultimate goal is to demonstrate the overall impact of new regulations that could help to maximize affordability while still enabling the market to efficiently support luxury development.

The study relies primarily upon data scraped from the 2015 tax bills of individual properties as issued by the New York City Department of Finance, and incorporates additional social and demographic datasets where appropriate. In addition to basic spatial and quantitative analyses, this research also outlines an implementation plan describing pathways to making the proposed changes a reality. The guiding question is:

How has the history of New York City's real estate market produced the existing inequities in the property tax structure and what policy strategies can be used to effectively reform it into a more cost-efficient and just system?

Chapter Summaries

The first step in this research was to study the existing property tax system in order to develop an understanding of the many abatements, incentives, exemptions, and idiosyncrasies of the current structure. One of the key critiques of the system today, and more pressingly, one of the key stumbling blocks to reform, is that the existing structure is complicated and largely opaque to citizens and even many politicians. As quoted in the Real Estate Forefront report cited above, the Chairman and CEO of Eastern Consolidated stated, "as a former tax lawyer, I am confounded by the City's tax code. Researching these numbers was akin to a Law & Order episode: every new piece of information generated more and more questions" (2)^{xii}. Accordingly, any analysis such as the one conducted herein first requires research into the existing structure. As part of this process, public documents

from the City of New York were supplemented with reports from other entities in efforts to develop a well-rounded picture of the tax in its current incarnation.

Chapter 2 synthesizes this research and offers historical context. The narrative tracks the evolution of the property tax over time from its earliest days through the passage of the current building classification schema of the early 1980s. It continues on to describe the implementation of the multilayered system currently in use today. The analysis relies largely upon historical accounts of the process of designing the system from a policy standpoint. This summary lays the foundations for the recommendations outlined in subsequent chapters.

With the stage set by the events and circumstances that led to the creation of the current taxation system, Chapter 3 pivots to examine the implications of these decisions for people living and working in the City today. This phase of the research utilizes data of public record batch scraped from the New York City Department of Finance's digital files using a Python script, supplemented where necessary with other data from City agencies. The data is explored at the parcel-level, walking through the process that the City publicizes for calculating property tax payments, and contrasting that against the actual values scraped from the digital tax bills. Perhaps the most noteworthy finding is that the Department of Finance does not appear to be following its own process in many instances to assess and tax City properties. Additionally, and as noted in the literature, property taxes seem to be poorly correlated with market values.

Chapter 4 examines pathways to change using the previous sections as a guide. In this portion of the investigation, the tax bill data is used to model reform proposals from the literature by calculating new tax rates and visualizing the results across the City. Policy options for this piece of the study include instituting a single tax rate for all properties, taxing properties at different rates based on two classes rather than the current four, and/or utilizing full market values to calculate tax bills rather than assessed values as is the case today. While this has been explored elsewhere in text and numbers, it has not been well-documented in a spatial format. The results demonstrate that it is difficult to find a happy medium between pursuing equity on behalf of struggling renters, and simultaneously protecting low-income homeowners in the outer boroughs. Single tax rate and two tax rate systems each show some measure of promise, but ultimately there is no 'silver bullet'.

Chapter 5 examines several additional reform scenarios not covered extensively in the literature, and then proposes a rough pathway towards implementation. Unfortunately from a feasibility standpoint, several critical components of New York City's property tax structure are controlled at the State level, so any successful change effort must stretch from grassroots to grasstops. Another key challenge to reform is that the current system operates largely to the benefit of wealthy homeowners who have a great deal of power to influence legislators. While this is the case with many policies however, the differentiating problem when it comes to property taxes is that most renters believe that they don't pay any property taxes because they do not own property. This is untrue; the Rent Guidelines Board estimates that passed-through property taxes actually comprise up to a full third of New Yorkers' rents. Accordingly, this analysis discusses avenues for building support at all levels, from incentivizing State legislators to alter policy trajectories using economic arguments, to developing digital advocacy tools to increase transparency for the City's millions of renters.

Limitations

While this research uses real data scraped from the tax bills distributed to actual households, there are several factors that challenge somewhat the validity of the findings. The first is that it is difficult to definitively determine how many Class 1 properties are in fact being operated as rentals. While it is almost guaranteed that large, multi-unit buildings are being rented out, it is hard to say how many smaller duplexes, triplexes, and even single-family homes are not owner-occupied. Accordingly, recommendations designed to decrease the levy on Class 2 properties may simply shift the burden off of renters in large buildings onto renters in smaller buildings, rather than onto owners per se.

Similarly, the significant (but rapidly decreasing) prevalence of rent stabilization in NYC heightens the difficulty of estimating how much property tax is passed through to tenants. This research assumes that the variation evens out sufficiently by way of owners raising rents on their market rate units to still yield valid results. Lastly, there are some concerns over mixed-use properties due to the parcel-level aggregation of the scraped tax bills. This process occluded some details for buildings with commercial space, and while the issues were partially resolved using MapPLUTO data, some discrepancies likely remain.

Implications

The current structure of New York City's property tax system privileges homeowners who tend to be white, older, and higher-income, over renters, who are more likely to be lower-income and of minority descent. The imbalance is so pronounced in fact, that the City has been taken to court on multiple occasions due to the discriminatory outcomes that this system both generates and perpetuates. Currently, the average price of an apartment in Manhattan is nearing \$2 million. The median purchase price stands at just shy of \$1 million. The median annual household income in Manhattan is \$66,739. Although Manhattan represents the most severe example, this trend is indicative of what is happening in neighborhoods across the City. Homeownership is clearly unattainable for the majority of New Yorkers, so the policy of incentivizing it through the property tax system is not beneficial. Moreover, the existing structure essentially mandates that the lowest-income New Yorkers pay proportionally more than their wealthier, home-owning counterparts for the services that benefit everyone.

Unfortunately, the political minefield of raising property taxes on single-family homeowners, along with the complex nature of New York City's current system has made large-scale reform a non-starter for basically every administration but David Dinkins's in the early 1990s. Therefore, this research attempts to explore options for property tax reform with an eye towards pragmatism, cost efficiency, and political realism. While certain reforms, although needed, are politically unfeasible from any angle, other cities both in the U.S. and across the developed world operate under significantly more functional, efficient, and fair systems; logically it should follow that New York could do the same.

Ideally, the results of this undertaking should have useful implications for housing policy advocates and potentially for enterprising policymakers as well. The results and analyses contained herein contrast the current property tax landscape with the projected outcomes of various reform scenarios. Accordingly, it should arm those working in the field with some additional knowledge and motivation to petition local government to tackle this difficult issue. It will require broad-based coalitions and a concerted effort over what will likely stretch to years, but it is a critical step towards ensuring New York remains accessible to low- and middle-income households.

II. Literature Review & History of the Property Tax System

New York City’s multi-faceted real property tax system has a long and complex history that dates back beyond the founding of the United States. Today, the real property tax represents the City’s single largest source of revenue, adding nearly \$23 billion last year to the City’s coffers^{xiii}. Undergirding that windfall however, is a system designed based on principles of inequity, opaqueness, and as one Senator so bluntly put it, “blatant racism” (11)^{xiv}. As the Fiscal Policy Institute writes:

“Building on principles first advanced by Adam Smith in The Wealth of Nations, the National Council of State Legislatures has articulated a set of six principles for a high-quality tax system, reflecting a changing political economy and evolving fiscal federalism: adequacy and reliability, economic neutrality and diversification, fairness, ease of administration and compliance, balancing tax burden and economic development concerns, and accountability to taxpayers. New York City’s tax system does well on the principles of adequacy and reliability, and on diversification, but it does not fare well on the other criteria” (1)^{xv}.

This chapter outlines the process through which New York City came to be ruled by such an unwieldy and inefficient structure. Additionally, it touches on the relevant research and proposals for reform found in the literature to date.

History

Year	Event
1654	First property tax law enacted in Dutch colony of New Amsterdam (future NYC)
1788	NY State legally enacts full market value assessments as the property tax standard
1798	NY divided into 9 tax jurisdictions, then districts and subdivisions by county & town
1813	County boards established to review assessment rolls & ensure equality in taxation
1827	Revenues from Erie Canal begin paying all property taxes
1842	Property tax is shifted back onto citizens
1859	First State Board of Equalization established to ensure equality across municipalities
1909	First official “tax law” codified into the Consolidated Laws of New York State
1928	State-level property tax terminated
1959	Original tax law revised requiring standardization of unequal assessing practices
1975	Hellerstein decision prompts large-scale overhaul of New York state taxation system
1981	State Senate and Assembly passed Senate Bill 7000/Assembly Bill 9200

Figure 5. *Timeline of Events Leading up to the Passage of S7000A, the Law that Codified New York City’s Current Property Tax System into Law*

The story of New York’s real property tax begins in 1654 when the area was still under Dutch colonial rule. During this period, much of the discussion was concerned with the quotas due to be collected from each county in order to maintain equality between jurisdictions. By 1788 however, local assessors were required to rely upon the assessments made by their federal-level peers, using the full market value as the standard for property tax determinations. In 1798, Congress intervened more seriously in local administration, raising tax rates throughout the U.S., and establishing an organization to oversee the implementation of the increase. New York was divided into nine separate tax jurisdictions, each headed by a commissioner, and these areas were then separated into districts, and again into subdivisions. For the most part, these boundaries fell along county lines at the district-level, and along town and city lines for subdivisions. While responsibility for

assessing properties remained at the federal level for some time, the job of ensuring equalization across jurisdictions in fact fell to the County commissioners. In essence, from the very start, New York's property tax structure was designed in such a way as to foster equity across classes and municipalities, highlighting the importance of this quality to an effective and efficient system.

By 1813, the New York State Legislature endeavored to build upon the equalization requirements decreed by Congress. The 1813 act empowered County Boards of Supervisors to review the assessment rolls across their various constituencies and to add or subtract from the total levy for any particular municipality to ensure they were paying their fair share in relation to the county overall. This was the first true codification and revision to the real property tax law in New York, and even included a provision for taxpayers to protest their assessments. From 1827 until 1842, revenues from the Erie Canal precluded the need for a state-level property tax. Beginning with its reinstatement though, distaste for the levy only increased.

Given these challenges, the first State Board of Equalization was established in 1859, with the goal of ensuring that no municipality was required to pay an outsize share of the levy. The Board experienced extreme difficulties in fulfilling its objective however, and the Governor ultimately intervened in 1870 with the goal of completely overhauling the system of assessment and taxation. A series of revisions followed, including a new complaint process for citizens in 1880, the appointment of a Statutory Revision Commission in 1889, and the ultimate acknowledgment at the turn of the century that in fact little improvement had been made to New York State's property tax structure since 1828. A Board of Tax Commissioners was created as a result, with the goal of managing and administering the entirety of the taxation process, including providing support to tax officials at all levels.

While the tax system had been in development for over a century by this point, it wasn't until 1909 that an official "Tax Law" as we currently conceive of it was codified into the Consolidated Laws of New York State. Over the subsequent two decades, the administration of the State system of property taxation went through a number of iterations, until in 1928, the State-level property tax was terminated in its entirety. While the state equalization rates remained in effect for a number of years in various capacities, this change essentially decentralized responsibility for administering the property tax to the local level. Despite the attempts of the Constitutional Convention of 1938 to address the issue, by 1944, the State Tax Commission was forced to admit that equalization efforts were failing in the absence of sufficient state-level oversight.

Accordingly, in 1947, the State Comptroller assembled a committee of citizens from across the state to study the impacts of the property tax on localities. The group found "that the constitutional limits originally imposed in 1884 on the basis of assessed valuation had over the years put localities in a financial straitjacket because local assessments had not kept pace with increases in property values" (The Uniform Standard, page 6). On January 1, 1950, a resultant constitutional amendment took effect that required the tax limit to be computed based on the five-year average of full property valuation rather than on the more arbitrarily decided assessed value figure. Around this same time, it was determined that the 1909 "Tax Law" needed recodification as it, "no longer possessed a logical pattern or uniform terminology" (7)^{xvi}. The new revised law became effective on October 1, 1959.

By 1970 however, those in authority realized that with administration based at the local level, extreme discrepancies existed in assessing practices. The Assessment

Improvement Law sought to change this by upgrading the position of assessor, providing training and equipment, and generally ensuring that assessors were sufficiently qualified and equipped to adequately carry out their job functions. New six year terms began on October 1, 1971, with assessors bound to abide by the new rules and duties ascribed to them.

The final significant event that laid the groundwork for New York City's current property tax structure occurred in 1975, with the infamous New York State Court of Appeals decision in the *Matter of Hellerstein v. Assessor, Town of Islip*, 37 N.Y.2d 1. While the aforementioned 1788 decision mandated that property be assessed at full value for taxation purposes, the statute was widely disregarded and had been previously questioned in court in 1852. The husband and wife team of law professor Jerome and Fire Island homeowner Pauline Hellerstein took issue with this practice, and brought suit against the Town of Islip. They argued that because the letter of the law was not followed in ensuring that every property was equitably taxed on its full market value, there was a distinct likelihood that the practice was causing varying rates of undervaluation and therefore inequalities in taxation. Although winning would have ultimately meant higher taxes for them, the Hellersteins believed the current system was inherently unfair and pursued the case to the highest court in the state, where the judge found in their favor and theoretically decreed the end of the practice of fractional assessment. In reality however, this shift was extremely difficult to implement, both logistically and politically, and significantly contributed to the current situation at hand in New York City.

In 1981, the Rules Committees of the State Senate and Assembly passed Senate Bill 7000/Assembly Bill 9200, which revamped the property tax structure for the majority of the state, but singled out New York City and Nassau County with a shift from a single class of structures to a four-tiered classification system. Class 1 included one-, two-, and three-family houses. Class 2 was comprised of cooperatives and condominiums, as well as rental properties. Class 3 covered utilities and Class 4 was made up of commercial buildings.

Had these categories been designed to abide by the full value assessment rule, the City's low and middle-income residents may have fared better. Instead, this property tax structure begins with unequal assessments, which are then taxed at different levels, on top of which a labyrinthine system of caps, abatements, and exemptions sits, prioritizing the rich at the expense of the poor. While New York City has changed substantially since 1981, the only major change to the property tax system has come in the form of the Cooperative and Condominium Property Tax Abatement, which simply shifts the burden of Class 2 taxes away from co-op and condo owners and further onto renters. The abatement was originally passed as a stopgap measure to buy the City time to present the State Legislature with a longer-term solution that would resolve the inequities, but instead, the Legislature has just repeatedly extended the abatement while tasking the Mayor's office with fixing the problem. No Mayor has done so to date. The following section outlines exactly how the current structure operates^{xvii xviii xix xx xxi xxii}.

Current System

As previously mentioned, this analysis will focus primarily on residential properties, i.e. Classes 1 and 2. Within Class 1, the Department of Finance uses sales data from comparable buildings to determine market value. The property is then assessed on 6% of that value. The next step is to apply any exemptions that lower this resulting assessed value, and only then is the property tax rate applied. The real property tax is the only tax

that the City can set at its own discretion, without the passage of legislation at the state level, so it is used to balance the budget^{xxiii}. Essentially, once all other expenses and revenues have been estimated, the City calculates the shortfall and then sets the year's property tax rates for each Class to meet the need^{xxiv}. For fiscal year 2016-2017, the Class 1 tax rate is 19.991%. Any number of abatements, such as the co-op and condo abatement and the Residential Conversion Abatement, can then be applied to further differentiate properties leading to large discrepancies between homes with the same market value.

While this structure is already somewhat complex, condominiums, cooperatives, and rental buildings go through an almost entirely different process for taxation purposes. The market values of these types of properties are determined by applying a cap rate to the amount of income they produce. This is the case even for condos and co-ops that are owned in the same way as the homes in Class 1, so a hypothetical income for the building must be generated using comparable rental properties. This creates distortions on a number of levels which will be described below. Once a market value has been determined, rather than the 6% assessment ratio applied to Class 1 properties, Class 2 buildings are assessed on 45% of their market value. Subsequently, exemptions are factored in, then the property tax rate is applied (12.892% for FY16-17), followed by any relevant abatements.

To further illustrate this process, consider two properties each with an estimated market value of \$500,000. One property is categorized as Class 1, and the other is in Class 2. Assuming no exemptions or abatements, the Class 1 property would receive a FY16-17 tax bill of \$5,997.30 ($\$500,000 \times .06 \times .19991$). The Class 2 property would receive a tax bill of \$29,007 ($\$500,000 \times .45 \times .12892$).

Assessment Practices

It is clear that the structure of the system itself is inequitable. Assessment practices though, add yet another layer of distortion to this convoluted process. To begin, Section 581 of the Real Property Tax Law prohibits condos and co-ops from being valued based on sales data, even when they were developed solely for sales purposes and are inhabited by owners. According to the Independent Budget Office (IBO), "By requiring the city to value coops and condos as if they were rental properties, Section 581 has left the city unable to capture the strong market demand for coop and condo apartments that has pushed up sales prices" (25)^{xxv}.

Across the City, co-ops and condos were valued at an average of 23.4% of what they would have been valued at using a more accurate, sales-based methodology. This ratio has been decreasing year-by-year. As a result, tax rates on rental buildings were 1.8 times higher than on condos and co-ops in 1997; by 2007 the disparity had reached 5.5 times higher^{xxvi}. In large part, this is due to the fact that in order to follow the rules, assessors must essentially generate a made-up operating income for a property that does not function as an income-producing building. This entails finding 'comparable' buildings nearby to base estimates off of, however many of these supposedly similar buildings are subject to rent control. The similarities are judged on such characteristics as age, location, and square footage. Unfortunately, this results in wildly different assessments due simply to neighborhood disparities. According to a report by the Citizens Budget Commission, "This variation generates dramatically different [effective tax rates] for condos and co-ops across neighborhoods, for reasons that have only to do with the availability of comparable local properties rather than some underlying policy goal" (7)^{xxvii}.

Moreover, for many new luxury condo buildings, there is simply nothing comparable in the City, yielding extreme undervaluations, especially in Manhattan. The problem is so severe that researchers at the Furman Center identified 50 individual co-op units that sold for more than the assessed value of the entire building^{xxviii}. Similarly, in an investigation of the new rash of super tall, luxury condo towers rising in Manhattan, CityLab noted that:

“The combined 89th and 90th floor penthouse at One57 set the new high-water mark for a single-family residence sale in New York. While the owner paid nine figures for the penthouse, the city only taxed the unit for \$17,000 in property taxes. That’s an effective property tax rate of 0.017 percent—about one one-hundredth of the average national tax rate”^{xxix}.

The IBO estimates that while in 1993, this imputed income system was producing overall market values for condos and co-ops that were 52% of what they would have been using a sales-based approach, by 2000, there was a difference of 59%. By 2007, estimated market values for taxing condos were 82% lower, and for co-ops 77% lower than they would have been using sales data (i.e. only 18% of the market value of condos is included in the assessment process).

Meanwhile, in 2013 the effective tax rates for 1-3 family homes and co-ops and condos were 0.80% and 0.82% respectively, while small rental buildings (4-10 units) were taxed at 2.12% and large rental buildings at a whopping 4.72%. To top this all off, NYPIRG found a pattern of chronic overassessment in low-income neighborhoods, with 90% of homes in the Bronx being overassessed. This further shifts the tax burden away from the rich and onto lower-income households. Manhattan sales prices are typically 3.74 times greater than the market value estimated for tax purposes, while in Queens the difference is only 2.76 times. This means that Queens apartment buildings are taxed 35% more heavily than apartment buildings in Manhattan^{xxx}.

Assessment Caps & Frozen Class Shares

This is not nearly the end of the story though. Assessment caps and frozen class shares further compound both inter- and intra-class differences in effective tax rates (taxable value divided by market value multiplied by 100^{xxxii}). Class 1 properties are subject to an assessment cap that mandates that assessed values for this category of buildings cannot increase more than 6% per year and simultaneously no more than 20% over 5 years. In other words, a one- to three- family home’s assessed value is the least option of 6% of its assessed market value, 106% of the previous year’s assessed value, or 120% of the assessed value of the previous five years. In a report entitled, *Property Taxes and Their Limits: Evidence from New York City*, Andrew Hayashi writes:

“From a policy perspective, assessment caps are designed to create neighborhood stability and prevent cash-poor homeowners from being forced out of their homes because of escalating property values. I find that in New York City, property tax caps on small residential properties represent a significant tax benefit that accrues to the most valuable properties and in the wealthiest neighborhoods. Moreover, rather than benefiting long-time homeowners on fixed incomes, who are their putative targets, the largest benefits go to the properties that are most likely to have been recently sold and to be located in neighborhoods where cash incomes have increased the most” (34)^{xxxiii}.

To further illustrate this concept, consider a Class 1 property for which the market value increases at 7% per year (a conservative estimate for many areas of the City,

particularly in rapidly gentrifying neighborhoods). During the first year only 6% of that value would be captured, the second and third years would see the same result, while in the fourth year, only 2% of the increase would be captured. In year five, 0% would be captured. In 2008, this foregone revenue amounted to \$1.5 billion, which is equal to approximately 12% of the City's entire tax revenue from that year. More than \$428 million of these breaks went to the most valuable 10% of properties in the City. Similarly, more than \$270 million went to households who had acquired their properties within the preceding five years, rather than homeowners struggling to stay in gentrifying neighborhoods per the original policy goal^{xxxiii}.

All of the tax breaks described above were awarded solely to Class 1 properties. Class 2, once again, is subject to a completely different system, although several sub-classes have been carved out over the years to bring condo and co-op assessments more in line with one-to-three family homes in terms of tax burden. Between 1986 and 1994, three sub-classes were created to differentiate properties within Class 2. Sub-class 2a applies to condo, co-op, and rental properties with 4-6 units, sub-class 2b applies to the same types of buildings but with 7-10 units, and sub-class 2c applies to 2-10 unit condo and co-op buildings specifically (Class 2 generally then, refers to properties with 11 or more units). These sub-classes are all subject to an 8% assessment cap per year, with a 30% limit over five years.

Conversely, rental properties and condos and co-ops not included in the aforementioned sub-classes are not protected by any limits on market value increases. All Class 2 properties outside of sub-classes 2a-c are subject to a process called transitional assessed value whereby any changes in market value are phased in over the course of five years. Each year, these properties are expected to cover 20% of the change in market value from that year, as well as 20% of the change from each of the four preceding years. Therefore, while Class 1 properties in appreciating areas often see their effective tax rates decrease over time as market value surges that exceed the assessment caps are lost to the system, Class 2 properties frequently see their effective tax rates increase even as their property values are dropping^{xxxiv}. In essence, real estate downturns allow the City to 'catch up' on capturing the market value increases for these rental buildings, a burden which falls squarely on low- and middle-income renters. In contrast, many smaller homeownership buildings reap the rewards of increasing property values without ever having to contribute their fair share in exchange.

In fact though, renter households shoulder even more of the burden than might be expected based on the issues described above. In part, this is due to the fact that the previously mentioned Cooperative and Condominium Property Tax Abatement was designed to decrease the disparity in taxation between single-family homeowners and single-family condo and co-op owners. This program effectively decreases the tax on the latter to bring their experience more in line with the former. By 2013 though, many co-op and condo owners had effective tax rates similar to those of Class 1 owners even before the abatement, to the point that in 2012, 60% of the tax break, or more than \$150 million, was unnecessary to achieve the underlying policy goal. Much of these excess funds were funneled to the wealthy Upper East and West Sides^{xxxv}.

Under different circumstances, this would be of no concern to renters. Unfortunately though, there is another tenet of the property tax system that mandates that the class shares (i.e. the proportion that Class 1, Class 2, etc. each pay) should stay

relatively consistent from year-to-year. S7000A was designed to maintain each Class's share of the total property tax levy at the 1981 levels. Class 1 properties already tended to be more deeply undervalued than other properties at this point in time, so the proposal was very politically popular with a voting electorate largely made up of homeowners. Subsequently, the class shares were intended to be adjusted every 2 years according to market changes, but this never happened.

Ultimately, in 1990, the class shares were addressed, however rather than basing this reevaluation on present-day market shares, policymakers instead used the existing distribution to essentially 'reset' the shares to 1981 levels. In efforts to appease the powerful homeowner voting bloc who would have seen a 42% increase in their taxes had the legislature followed the established policy stipulations, they instead codified into law a system that "resulted in significant foregone assessed value that – barring an unprecedented collapse in housing prices – will probably never be recaptured" (16)^{xxxvi}. In total, this excludes \$300 billion from the property tax base each year^{xxxvii}.

S7000A also capped class share adjustments at 5% per year. This means that Class 2 was locked into paying a disproportionately large share of the property tax in perpetuity when the current tax law was first codified in 1981. Subsequently, when the Co-op and Condo Abatement reduced taxes for the target properties by 17.5% and 25% respectively, rental buildings were forced to shoulder the additional burden to ensure that Class 2 maintained its apportioned share of the levy^{xxxviii}. For instance, in fiscal year 2016, the Co-op and Condo Abatement Program reduced the tax bills of 270,563 owners by \$429 million^{xxxix}. This value was then instead paid by renters.

In recent years, the class share adjustment cap has typically been lowered to 2 or 2.5%, and even as low as 0%, further skewing the balance away from Class 1 tax increases^{xl}. The result of this inequitable design is that during fiscal year 2017, the Department of Finance estimates that while Class 1 comprises 45.63% of the City's market value, they will pay just 15.03% of the property taxes in the City. Conversely, while Class 2 properties make up 24.19% of the City's market value, they will pay 36.55% of the property taxes, with rental buildings paying a particularly outsize share based on the structure described above^{xli}.

Consequently, in its report entitled, "Twenty-five Years After S7000A: How Property Tax Burdens Have Shifted in New York City," the Independent Budget Office estimates that "if changes in market values were fully reflected in the annual share of the total tax levy for each property type...homeowners would face an aggregate tax levy 67 percent higher than what they pay today"^{xlii}. The Citizens Budget Commission found that in fiscal year 2015, \$4.5 billion was lost to cap and phase-in rules^{xliii}. In testimony delivered to the New York State Assembly Committee on Real Property Taxation, George Sweeting, the Deputy Director of the New York City Independent Budget Office explained the problem using the following example:

"The city median ETR [effective tax rate] for one-, two-, and three-family properties is 0.92 or \$0.92 for every \$100 of market value, based on the 2016 assessment roll. But looking at individual neighborhoods, we see that in places such as Park Slope in Brooklyn, which has seen steady appreciation for more than 20 years, the median ETR is \$0.30 for every \$100 in value, less than one-third of the citywide measure. Just a few miles away in Canarsie the median ETR is 3.7 times higher at \$1.09 for every \$100 in

value. This means the owner of a \$500,000 house in Park Slope would pay about \$1,241 while the owner of a \$500,000 house in Canarsie would pay \$5,462” (2)^{xliv}.

To further this comparison, in 2013, Mayor Bill de Blasio paid \$2,900 in taxes on each of his \$1.1 million Park Slope townhouses. Another homeowner, in Woodhaven, Queens, paid \$3,700 in taxes on a townhouse valued at \$299,000. Meanwhile, a renter in the Bronx who paid \$800 per month for a studio apartment, paid \$2,880 in passed through property taxes, essentially the same amount that the Mayor paid for a million dollar townhouse. While in most real estate markets, demand is more elastic than supply, i.e. people will simply move away if rents are too high, NYC is so desirable and geographically constrained that landlords can continue to raise rents without fear of being unable to find tenants. As Business Insider notes, under the current system, “Rents must rise so that landlords are willing to keep their buildings as rental despite the unfavorable tax treatment”^{xlv}. Accordingly, the Rent Guidelines Board estimates that approximately 30-33% of a tenant’s rent is comprised of passed-through property tax bills^{xlvi}.

Exemptions & Abatements

Two other aspects of the system that shift the burden of property taxes are exemptions and abatements, also known as property tax expenditures. These programs can be broadly grouped into two categories: (1) building-wide incentives for encouraging construction; and (2) tax relief for individual homeowners or tenants. Many of the programs have built-in sunset dates to prompt periodic review.

In total, fiscal year 2016 real property tax expenditures amounted to \$5.6 billion, with housing expenditures comprising 51% of that and economic development incentives 35%^{xlvii}. Tax-exempt properties including city, state, federal, and international government holdings, private schools, faith institutions, hospitals, charities, and even such ‘cultural institutions’ as Madison Square Garden, amount to two-thirds the value of the total property tax levy for a tally of nearly \$10 billion in foregone tax revenue^{xlviii}. The top three tax expenditures in the City are, in order of size/cost: the 421-a program, the Co-op and Condo Abatement, and the J-51 program, costing the City a total of more than \$1.3 billion each year^{xlix}. While the abatement for co-ops and condos has already been covered in detail, J-51 provides both an exemption and an abatement for owners that undertake renovations to improve their buildings. Originally adopted in 1955 to encourage upgrades to the last of the cold-water tenements, it has since been argued that, “Under no reasonable expectation will the J-51 program offer a net return against the taxes forgiven. The subsidies should be considered as outright grants” (58)ⁱ. Annually, this program costs the City more than \$250 millionⁱⁱ.

The 421-a program is of particular interest at this point in time as it lapsed in early 2016 after a protracted fight between the State and City governments. In a report by the Independent Budget Office, the authors write: “The 421-a program has two broad goals: to stimulate the production of housing and to ensure that a portion of the new housing will be affordable to low- and moderate-income New Yorkers. Little is known about the program’s success in meeting these goals, nor about the associated costs” (2)ⁱⁱⁱ.

Since 1985, 192,000 new apartment units have been constructed in New York City; more than one-third of these apartments (69,000 units) were developed under the 421-a program. The program is designed as an exemption for new housing projects with three or more units that are located on sites that were vacant, underutilized, or of a nonconforming use three years prior to beginning construction. The exemption excuses owners from

paying the increase in property taxes resulting from improving the parcel. In other words, if an owner buys a vacant lot for \$1 million and constructs a building that increases the value to \$10 million, he/she does not have to pay taxes on the additional \$9 million for the entirety of the exemption period, which can be 10, 15, 20, or 25 years^{liii}. In exchange, 20% of units must be set aside as affordable to households making 60% of the Area Median Income, however this is only within a specific geographic area. Outside of that area, which encompasses the vast majority of the outer boroughs, there are no affordable housing requirements whatsoever.

Through this process, 421-a tax breaks have subsidized thousands of luxury units as the annual cost of the program has increased by 1100% since 1998, more than six times the total increase in the overall property tax levy^{liv}. The Association for Neighborhood and Housing Development found that 421-a has actually resulted in more than \$1.1 billion in foregone City revenue in exchange for fewer than 9% of the new units being operated as affordable. The report also notes “that the 421a Developer’s Tax Break is currently lacking in basic mechanisms to keep track of affordable units created under 421a” (9)^{lv}, highlighting the lack of oversight that has plagued this program from the outset.

Further evidence of this problem was exposed in October 2016, when ProPublica published an investigation that found that nearly two-thirds of the approximately 6,400 rental properties currently receiving 421-a benefits do not have an approved application on file. These landlords are saving \$300 million each year in unpaid property taxes while providing no benefits at all to the City. Some applications have been sitting unaddressed for more than two decades while the property owner has been collecting on the exemption. The authors also observe however, “It also means that Mayor Bill de Blasio, who has made creating and preserving affordable housing a priority, could add thousands of apartments to his tally simply by enforcing existing laws”^{lvi}.

Citywide Implications

Due in large part to this multi-layered system of assessment disparities, class caveats, levy apportionments, abatements, exemptions, caps, etc., a report by the Center for Research, Regional Education and Outreach at the State University of New York at New Paltz found that most property owners have little to no idea of how their property tax bill is calculated. Moreover, the vast majority of renters believe that they do not pay property taxes at all. In fact, it is quite the opposite. New York City imposes one of the highest tax rates on apartment buildings in the entire U.S.; Washington, D.C. taxes apartments at a rate 80% lower than NYC^{lvii}.

Even more concerning, while New York City’s tax on apartments is second only to Detroit, a City with a very different real estate market, the City’s tax on one- to three-family homes is also an outlier as it is lower than almost anywhere else. The effective tax rate (ETR) on Class 1 properties is 0.67%. The effective tax rate on Class 2 properties is 3.31%, or five times higher. Drilling down specifically to large apartment buildings, Business Insider reports that “In large cities nationally, apartment tax rates tend to be 1.4 times higher than tax rates on owner-occupied homes. In NYC, they’re 6.4 times higher”^{lviii}.

Similarly, the Independent Budget Office found that since the passage of S7000A, “not only has there not been any move toward equalization, but the gaps between Class 1 houses and other property types have grown wider. For co-ops, the ratio to the one-, two-, and three-family ETR has gone from 0.7 to 1.5, and for elevator apartment buildings the ratio grew from 2.8 to 8.1” (20)^{lix}. Furthermore, the effective tax rate for homeowners in

the city has dropped by 65% since 1984, while it has risen slightly for large apartment buildings^{lx}.

These many inefficiencies within the property tax structure have resulted in even more inefficiencies in the market. The Furman Center for Real Estate and Urban Policy has demonstrated that this favoring of homeownership over rentership, in a City where 67.9% of the residents rent, has actually skewed development preferences substantively in favor of Class 1 properties, as well as condos and co-ops over rental buildings, further exacerbating the already dire rental housing crunch^{lxi}. This claim is supported by the fact that 14,500 new luxury units are scheduled to hit the market between 2015 and the end of 2017, however only 5,000 are projected to have sold during that same time period. In other words, the City will have more than five years of excess stock of ultra high-end apartments that already garner favorable treatment from the City, while there is such an undersupply of lower-cost units that more than half of the City is paying more than 50% of their incomes towards rent^{lxii}. One study even found a strong positive correlation between average building tax payments and residential abandonment rates in the City. The authors write that “The city would save money by reducing assessment rates on buildings where the probability of abandonment is high” (373)^{lxiii}.

Attempts at Reform

Given all of this, it may seem strange that no action has been taken to try and fix this inefficient arrangement. In fact, there have been some attempts at reform. The Dinkins administration, along with the City Council, appointed a property tax reform commission in 1993 to lay out a plan to address the inequity and complexity of the existing system. Unfortunately, the Commission delivered its report on the final day of the Dinkins mayorship, and the incoming Giuliani administration immediately tabled the issue. The only inequity that was ever addressed as a result of the Commission’s recommendations is the observation that co-ops and condos were taxed at a higher rate than single-family homes.

Subsequently, the Bloomberg administration made several adjustments to the overall tax rate, impacting everyone, but also provided a ‘temporary’ \$400 homeowner tax rebate starting in the spring of 2004 that cost approximately \$250 million per year while offering no relief to renters or owners of rental properties. More recently, 2013 saw the state legislature vote to phase out the co-op and condo abatement program for non-resident owners, although it was extended for yet another three years for residents. The change impacts 89,000 units and contributed to an increase in property tax revenue of \$94 million in fiscal year 2015^{lxiv}.

Additionally, in an investigation entitled ‘Why Effort to Reform NYC Property Taxes Has Stalled’, the authors write that “the City Council allocated over \$400,000 in the FY 2015 budget for two task forces to study taxes—property taxes and commercial tax expenditures. So far, the Task Force on Commercial Tax Expenditures, created in January, has met three times. The property tax commission has yet to be created.” They go on to note that Manhattan Borough President Gale Brewer stated at a Regional Plan Association conference that the reason for this is that “it was “just too political” to do”^{lxv}.

While frequently invoked, politics should not justify perpetuating an inequitable system. Accordingly, there has been some discussion, at least within the literature, of potential reform strategies. As previously mentioned, specific policy proposals are explored in more detail in Chapter 4, in which several of them are modeled out using GIS.

More generally however, advocates, researchers, and politicians alike have all called for equalization and a reduction in the skew towards undertaxing homeowners to the detriment of New York City's large population of low- and middle-income renters. While different approaches have been proposed, the IBO in its report on the impacts and outcomes of S7000A list a series of 'Issues to be Considered' when weighing any reform proposal. They are as follows (60-61)^{lxvi}:

- Transition: reforms would need to include a transition period, likely five to ten years, in order to sustainably move to the new system in an effective and controlled manner
- Capitalization: reforms must account for their inevitable impact on market values (e.g. higher tax rates would eventually drive down prices)
- Phasing in Value Changes: phase-in rules would likely need to replace assessment caps as a way of preventing sudden tax spikes for any individual residents
- Class Shares: any shift in the class share system should build in rules for adjustment to keep shares of taxes in line with shares of market value
- Ability to Pay: any new system should be carefully designed so as to ensure that the adjusted rates align with people's incomes and abilities to meet their tax obligations

The analysis that follows will examine both the current state of the property tax in spatial terms, as well as how various shifts might play out across the boroughs.

III. Spatial Distribution of the Property Tax Burden Today

The aim of the preceding chapter was to provide context around the inequalities that have been built into New York City's property tax structure over time, and to describe the skew in favor of wealthy homeowners over millions of renter households. Expanding upon this framework, Chapter 3 examines the impact of these policies on the City and its residents from a spatial standpoint.

While repeated financial and narrative analyses have been completed on the subject of New York City's property tax system, little has been done in the way of visually representing the results of the existing tax structure. The Department of Finance hosts maps on its website allowing visitors to examine data on single parcels, but there is currently no reliable way of visualizing the entire City and its varying taxation rates at once. By leveraging digital tools, this research examines the spatial variation in tax data scraped from individual households' 2015 tax bills. The results illustrate variation in effective tax rates applied to homeownership buildings versus rental buildings, as well as divergences across geographies. The investigation is focused primarily at the parcel level, as New York City neighborhoods are often so diverse that aggregation obscures key findings.

Methods

In preparation for this analysis, the assessment rolls from 2009 through 2017 were downloaded from New York City's Department of Finance website. These database files include information about tentative and final market and assessment values, transitional and exempt values, land values, tax classes, and building characteristics at the parcel level for all of the lots in the City. This data was loaded into ArcGIS and joined to borough-specific shapefiles from the City's MapPLUTO database, which is a collection of data managed by the Department of City Planning that provides property data for every parcel across the five boroughs^{lxvii}. The datasets were joined by associating the unique borough-block-lot (BBL) identification numbers in MapPLUTO with the same values in the Department of Finance datasets. The five resultant borough datasets were then appended into one shapefile using ArcMap's Data Management tools.

Unfortunately, once the data had been symbolized on a variety of factors, it became clear that additional information was needed. As noted in the literature, while all property tax information is a matter of public record, it is effectively impossible to get a full and accurate picture of what each property is paying from the compiled data made readily available by the Department of Finance. Given the multi-layered process of determining market value, then applying the assessment ratio, followed by exemptions, then the property tax rate, then abatements, there is essentially no way to find out what any single owner is required to pay without looking at the actual tax bills. Accordingly, this became a necessary next step.

Since the Department of Finance offers a portal to view individual tax bills by typing in the borough-block-lot identifier, it seemed likely feasible to scrape this data using a Python script. In searching for examples to work from however, it was revealed that someone had already undertaken this project in pursuit of accurate rent stabilization data. A further investigation uncovered that this individual had subsequently collaborated with two other 'civic hackers' to scrape all of the data from the 2015 tax bills of every property in the City, and then aggregate them to the parcel level for public consumption. Given that

some of the 2016 data is still being protested, using the 2015 data seemed like a reasonable starting point in gaining an accurate picture of the City's current tax rolls.

Accordingly, this data was downloaded, reformatted, and loaded into ArcGIS. Once again, the MapPLUTO shapefiles were used to associate the table with the corresponding geometry by linking the borough-block-lot numbers. The five borough shapefiles were combined into one MapPLUTO dataset, then joined to the scraped tax bill data. This provided a complete dataset of every parcel in the City with a property tax bill on file in the Department of Finance's database from 2015. Data included are as follows:

- Street address
- Borough-block-lot number
- Owner's name
- Condo unit number and type where applicable
- Tax class
- Tax rate
- Estimated market value
- Billable assessed value
- Total tax before exemptions and abatements (billable assessed value × tax rate)
- Total tax after exemptions but before abatements
- Total tax due after exemptions and abatements

Another table also broke out specific abatement and exemption data for each property, detailing which programs impacted the ultimate tax bill^{lxviii}. Armed with this data, it was then possible to begin visualizing the City's property tax structure at the parcel level using ArcMap.

Spatial Tax Class Distribution

The first step in painting the picture of the City's property tax burden was to symbolize the overall tax class distribution, detailing the location and prevalence of the City's various property categories. For reference, the Department of Finance identifies those categories as follows:

1. **Class 1** includes the majority of residential properties that have one to three units (including family homes and small stores or offices with one or two attached apartments), as well as most condominiums that are three stories or fewer
2. **Class 2** includes all other property that is not included in Class 1 and which is primarily residential, including rental buildings, cooperatives, and condominiums
 - a. **Sub-Class 2a** consists of 4-6 unit rental buildings
 - b. **Sub-Class 2b** consists of 7-10 unit rental buildings
 - c. **Sub-Class 2c** consists of 2-10 unit cooperative or condominium buildings (Properties identified solely as Class 2 must have 11 units or more)
3. **Class 3** is primarily utility properties
4. **Class 4** includes all commercial and industrial properties such as retail, office, and factory buildings, as well as all other properties not included in any of the other classes^{lxix}

One of the critical aspects that makes New York City and other urban centers such desirable places to live is the mix of uses prevalent throughout all of the boroughs. Accordingly, there is not a clear delineation of explicitly commercial areas and specifically residential areas across different neighborhoods. Rather, a mix of commercial and residential pervades most areas. To note, it is precisely this variety and accessibility that

contributes substantively to the City's ever-rising property values, particularly in Manhattan.

Figure 6 below visualizes the City's tax classes with the aid of the conventional land use colors as defined by the American Planning Association. Based on this scheme, brown/dark red represents Class 4 properties (commercial/industrial /office), yellow represents Class 1 (primarily 1-3 family homes), and a darker yellow verging on orange is used to represent the larger rental buildings comprising Class 2. Parks and open spaces are shown in green and Class 3's utility properties are symbolized in purple. As is the convention for NYC, mixed use parcels were classified based on their predominant use.

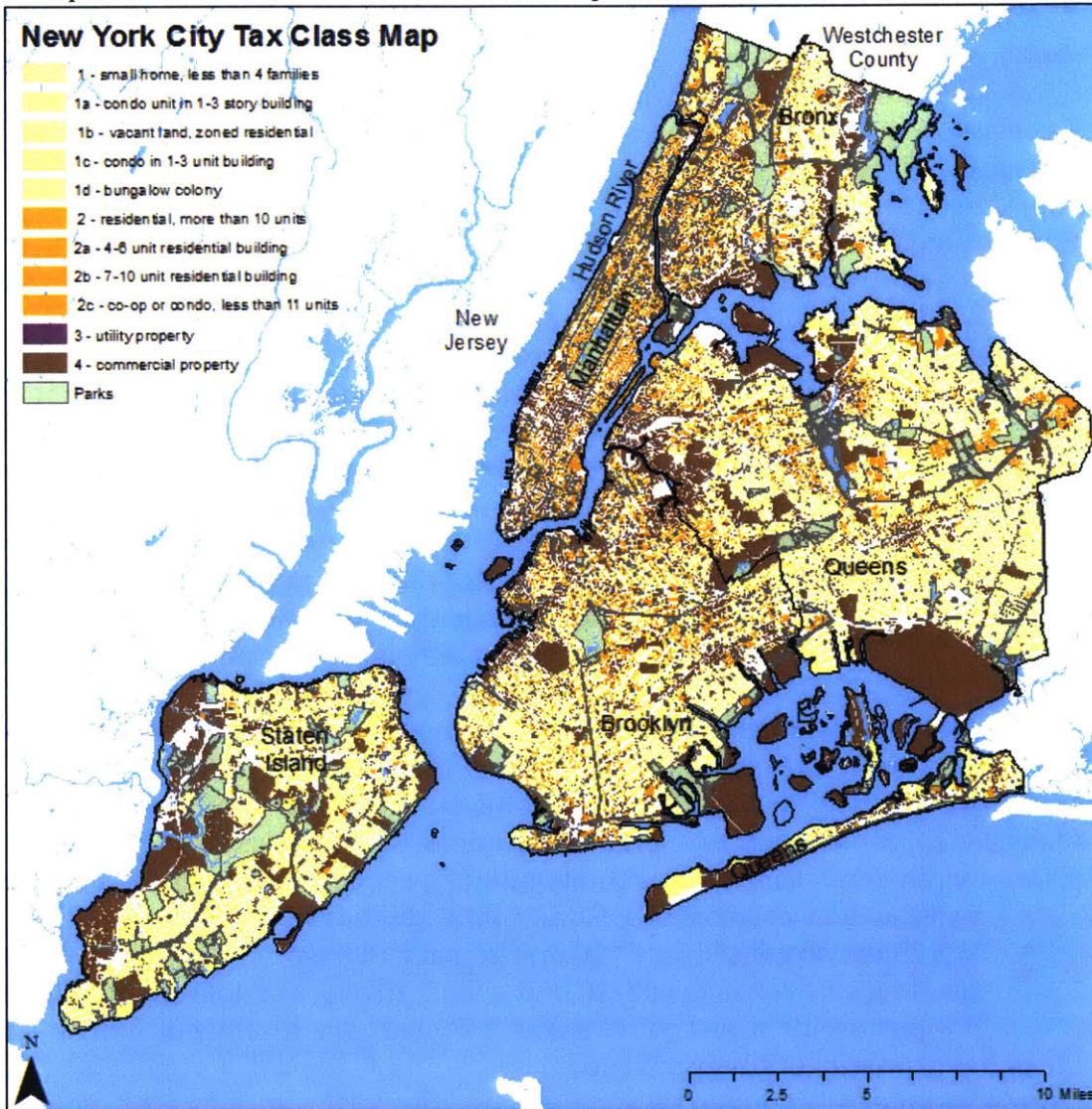


Figure 6. Parcel Map of New York City Symbolized According to Tax Class

As this analysis is focused almost solely on residential properties, Figure 6 above is replicated below in Figure 7 with the Class 3 and 4 parcels removed so that only homes and apartment buildings remain. For ease of viewing, Class 2 properties have been re-symbolized in varying shades of blue to contrast with the Class 1 parcels that remain yellow. Additionally, the geographic reference labels have been removed and will be excluded moving forward in the interests of visual clarity.

The Class 1 sub-categories shown are only for descriptive purposes in detailing what types of buildings are contained within each category. The Department of Finance does not differentiate between these properties in terms of tax treatment, so they are therefore not relevant for this analysis. On the flip side, the buildings that fall into the sub-categories within Class 2 qualify for considerably different taxation processes than general Class 2 properties as mentioned in Chapter 2. This differential treatment includes the Cooperative and Condominium Tax Abatement which, to reiterate, is designed to bring the tax burden on co-ops and condos more in line with Class 1 properties. The decrease in taxes is substantial; co-ops see an average of a 17.5% decrease in their tax bills, while condos enjoy a reduction of 25%.

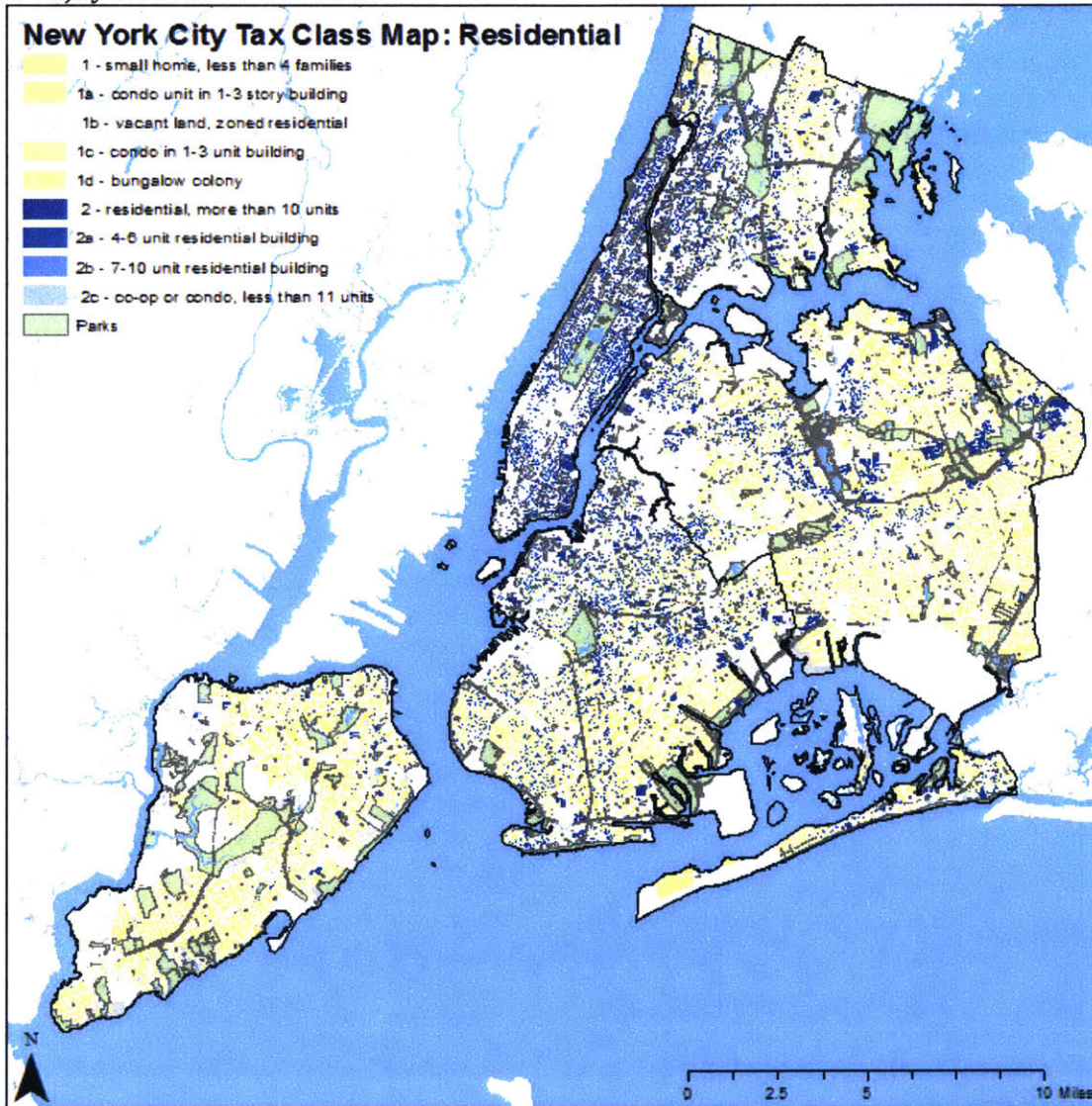


Figure 7. Residential Parcel Map of New York City Symbolized According to Tax Class

Figure 7 above shows that the majority of Class 1 properties are located in the outer boroughs, while Manhattan and the western half of the Bronx host much of the City's large rental housing. Staten Island and southern Queens are almost entirely comprised of lower-density homeownership properties, while Brooklyn is more mixed, with a concentration of larger buildings in the rapidly-gentrifying areas radiating out of downtown and smaller

homes on the outskirts. This is to be expected from both density and cost standpoints; Manhattan land values are so high that it would likely be financially infeasible to build anything but multi-unit properties there. Conversely, values have risen less quickly in the areas of the City that are farther from this hub, making them less desirable for developers. Accordingly, smaller homes have remained.

While this may all seem reasonable and even predictable, it is critical to note that the overwhelming majority of New York City's rental properties are located either in Manhattan, perennially the most expensive real estate market in the City, and frequently the country, and rapidly appreciating areas of Brooklyn. Save for the housing located in the Bronx, renters are effectively constrained to high-priced markets in their search for housing, contributing to the 50% rent burden figure. This mismatch will only increase in significance as developers' preferences shift increasingly away from building rental housing due to the unfavorable taxation policies.

Beginning with Estimated Market Values

Using the data scraped from the tax bills, the first thing to examine is the spatial distribution of the estimated market values for Class 1 and Class 2 properties.

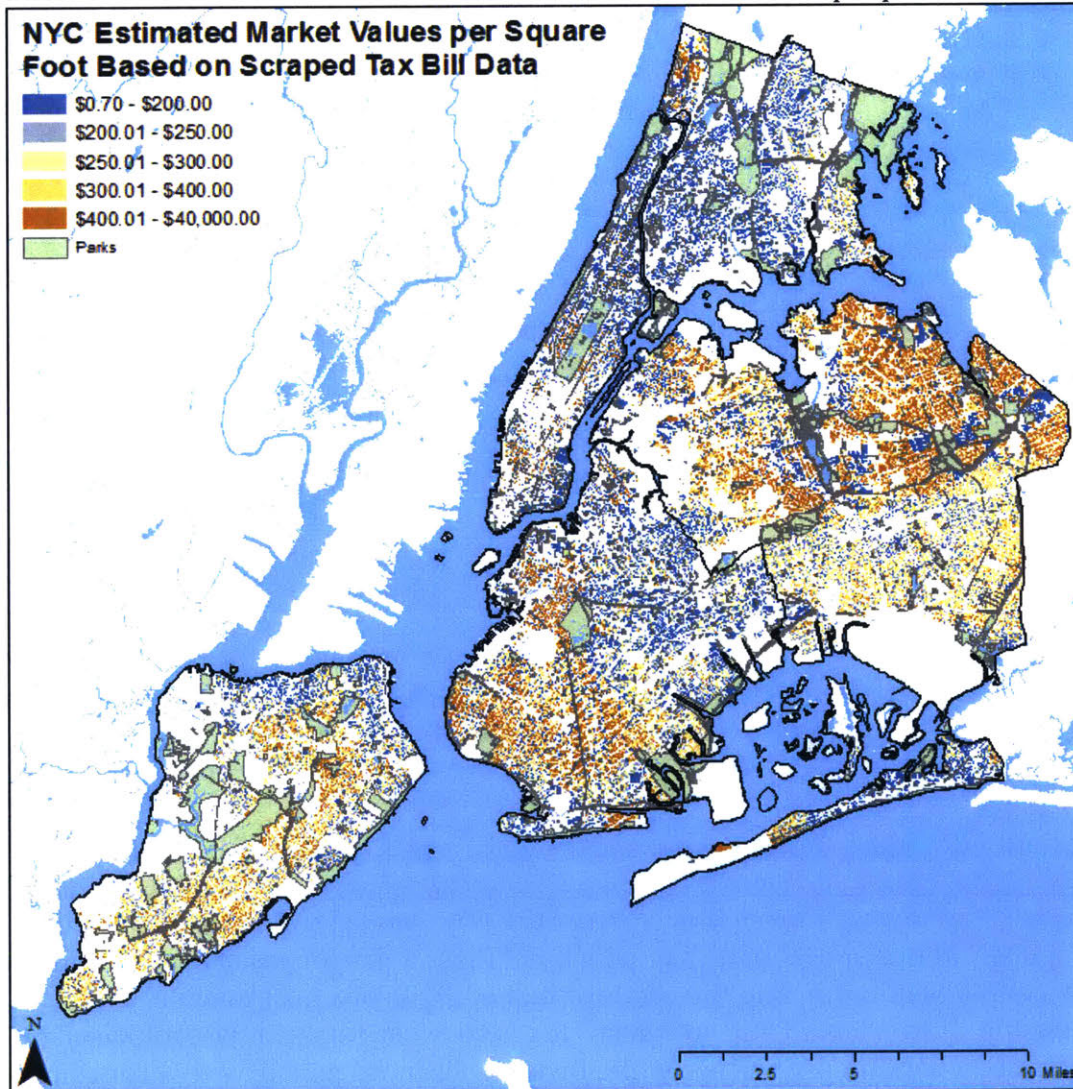


Figure 8. Residential Parcel Map of NYC Estimated Market Values per Department of Finance

Looking at Figure 8 above depicting estimated market value by square foot, there are some discrepancies between the average income of an area as illustrated in Figure 1 in Chapter 1, and the market values most prevalent there according to the Department of Finance. For instance, there is a startling amount of blue interspersed with the brown along either side of Central Park. While this is likely good news for renters, based on current property values in Manhattan it seems odd that there would be so many buildings on the Upper West and East Sides falling into the lowest category of estimated market values per square foot. Similarly, many low-income areas of Brooklyn outside of the primary gentrification corridor are in the highest estimated market value bracket. Already, at this first stage in the tax determination process, New York City's methods for determining market values are producing skew across the boroughs.

There is more to the story though; depicting just the Class 2 properties yields Figure 9 below:

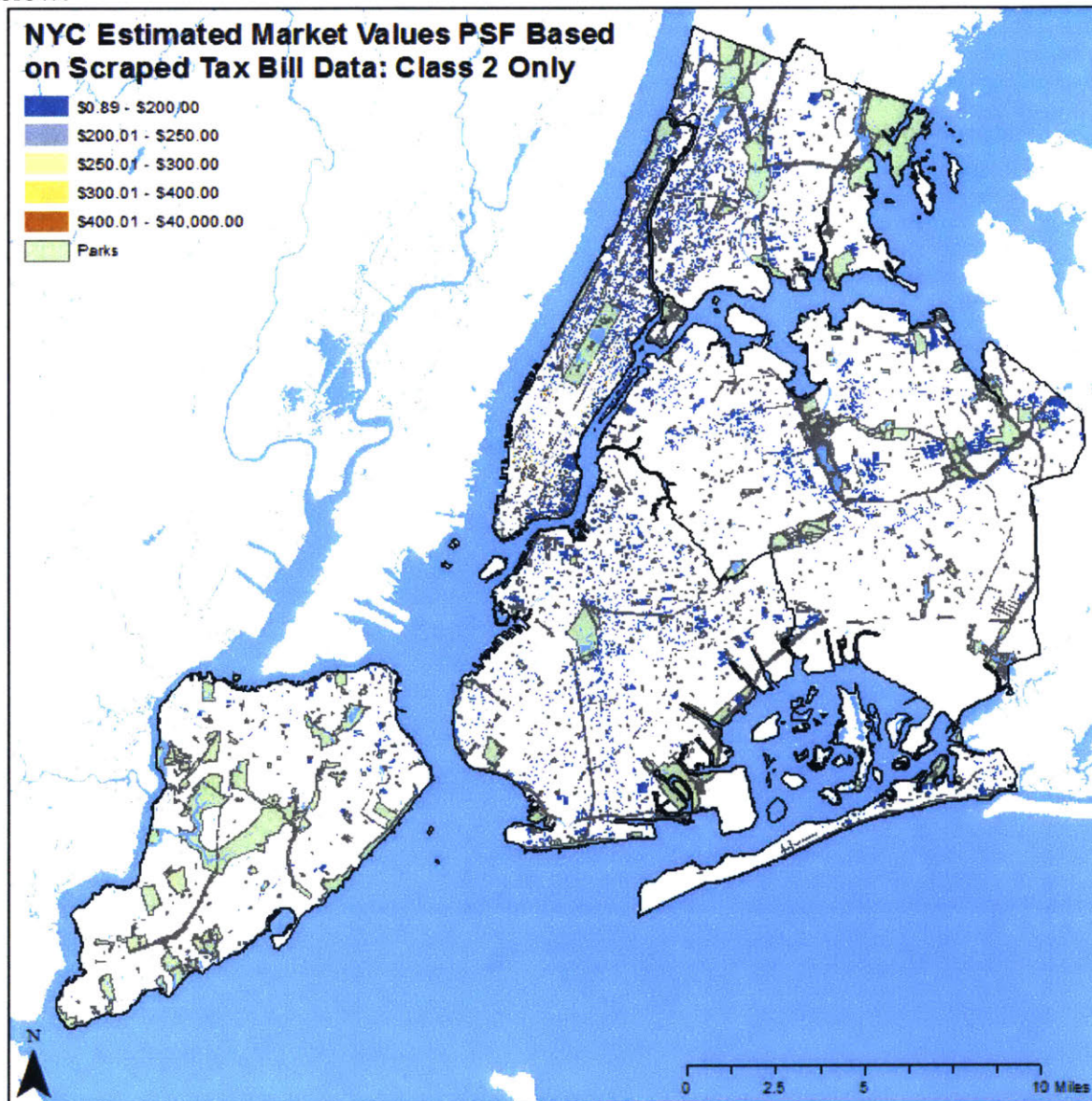


Figure 9. Class 2 Only Parcel Map of NYC Estimated Market Values Per Square Foot (PSF)

Almost all of the Class 2 properties fall into the lowest category of estimated market values by square foot. This seems an unlikely outcome if the Department of Finance were accurately valuing all properties by the same standards. Unfortunately, the process of valuing these buildings based on comparable properties nearby yields questionable results, evidently in the direction of undervaluation for some.

Calculating Billable Assessed Values

If New York City followed the letter of New York State’s original law resulting from the Hellerstein case decision (taxing only on full market values), the billable assessed value map would look exactly the same as Figure 8 above. Similarly, if New York City assessed all residential properties at the same or nearly the same rates, the map would still look largely similar. However, as discussed in Chapter 2, New York City assesses Class 1 properties on 6% of their estimated market value, whereas Class 2 properties are assessed on 45% of their estimated market value. Accordingly, the billable assessed value map should look like Figure 10 below where Class 2 properties have high assessed values per square foot, but so do Class 1 properties with high estimated market values:

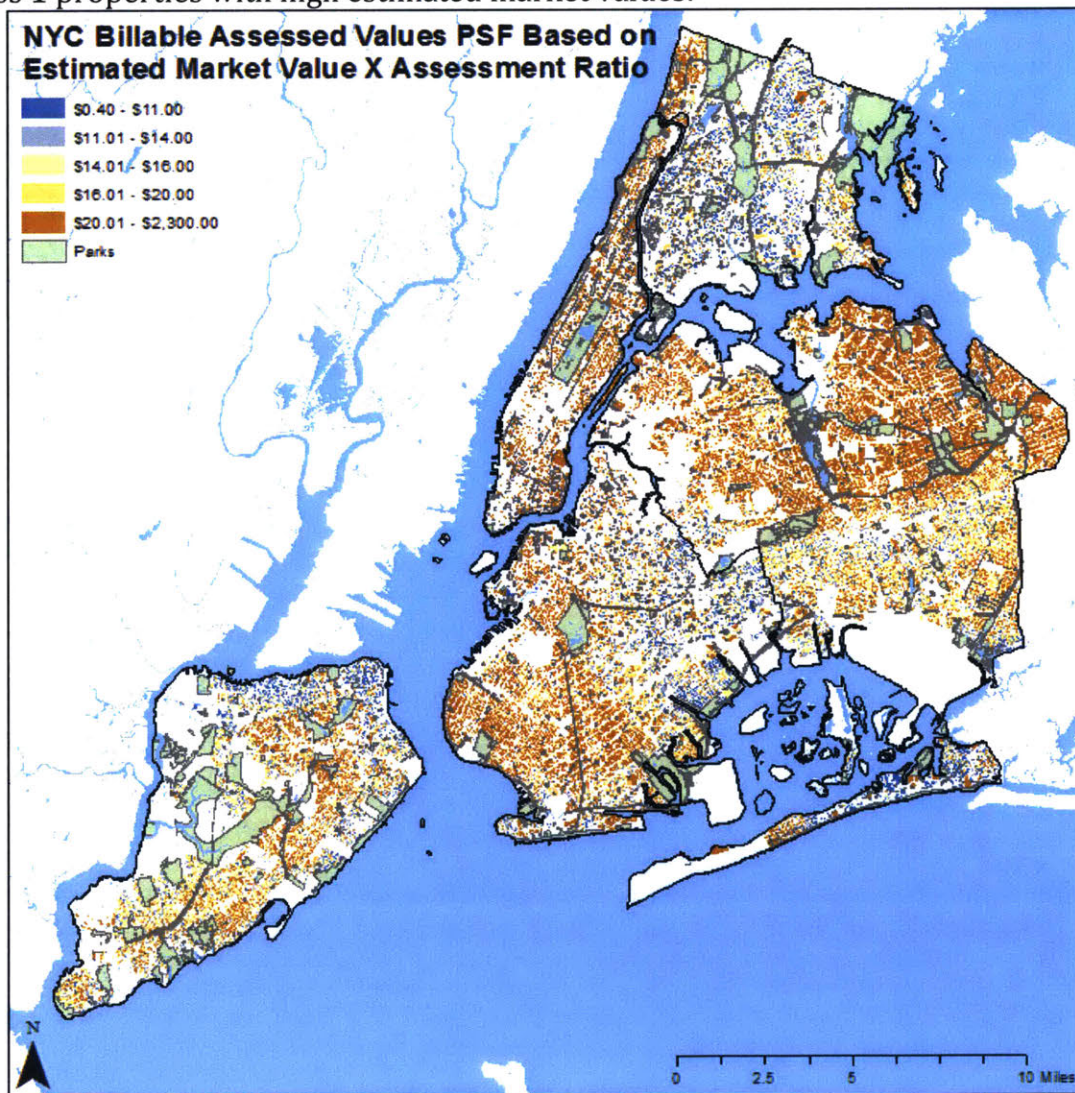


Figure 10. Residential Parcel Map of New York City Billable Assessed Values Calculated Based on the Process Described Publicly by the Department of Finance (DOF)

Instead, the scraped tax bill data shows something rather different. Based on some unclear math by the Department of Finance, Figure 11 illustrates that a substantial number of parcels actually have assessed values per square foot on the lower-end of the scale. Rather than showing that most parcels have assessed values above \$20 per square foot as can be easily seen in the map above, the map below highlights the fact that many parcels, particularly across Brooklyn and Queens, are being assessed at rates significantly below what they would be based solely on the process outlined for public consumption on the City’s website. Separating out the Class 2 properties demonstrates that these undervaluations are being conferred solely upon Class 1 properties, effectively shifting an undue portion of the anticipated tax burden onto rental buildings even at this early stage in the tax calculation process.

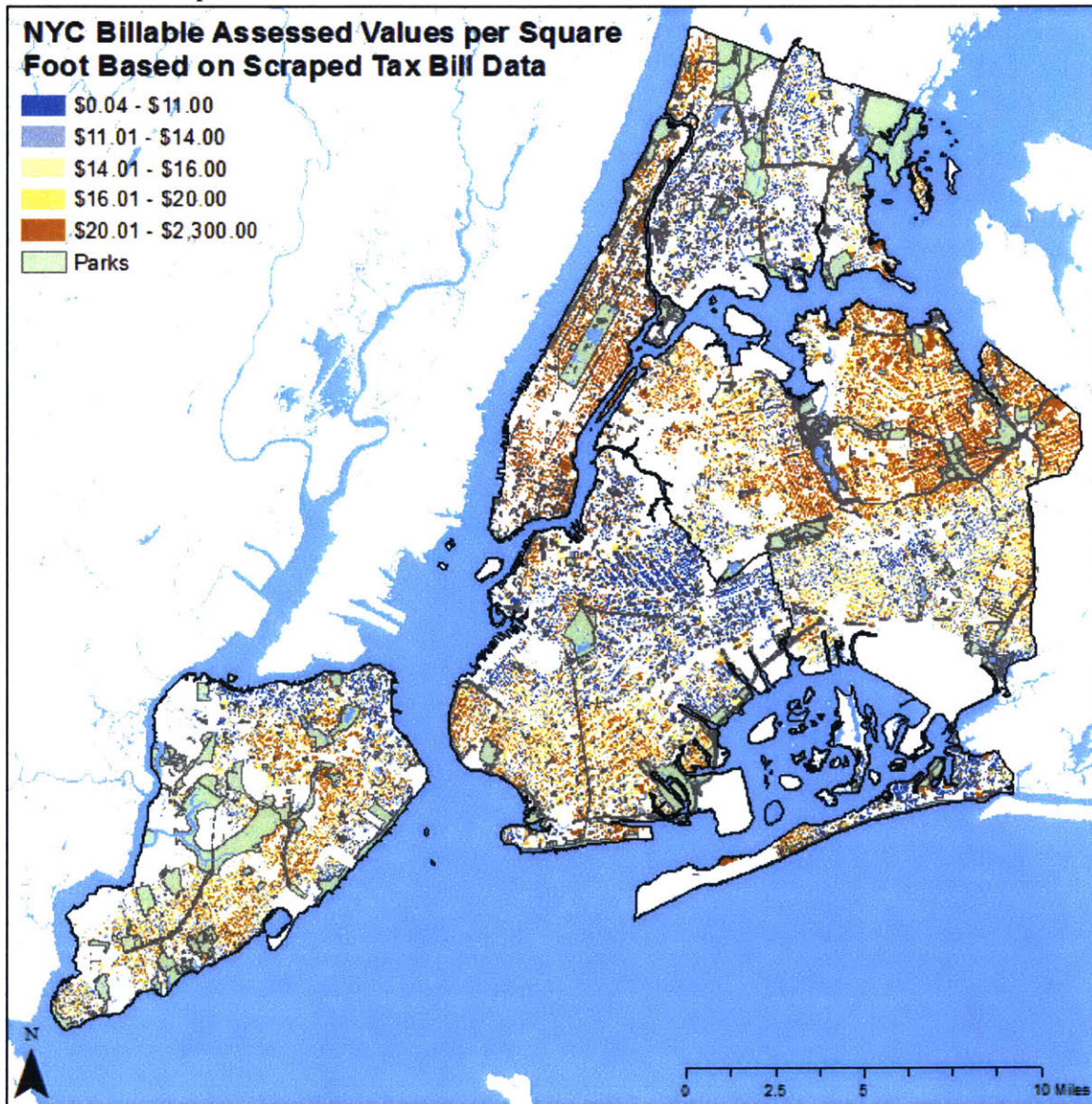


Figure 11. Residential Parcel Map of New York City Billable Assessed Values per DOF Applying Exemptions & Abatements

To review for the reader’s sake the process of calculating tax payments, the first step symbolized the estimated market values, then the next step showed the assessed values,

which should theoretically be equal to 6% or 45% of market value for Class 1 and Class 2 respectively. The next step is to apply the appropriate tax rate to each Class.

As discussed in Chapter 2, New York City uses the property tax to balance its budget. The tax rates for each Class are not determined until after the City has evaluated all of its other revenues and expenses. At that point, the Classes are assigned tax rates that will account for the shortfall. For 2015, the property tax rate for Class 1 was 19.157%, and for Class 2 it was 12.855%. In this instance, the math used to calculate the values scraped from the tax bills is clear; multiplying the billable assessed value figures by the relevant tax rate yielded the stated property tax value before factoring in exemptions or abatements. Using the scraped values, the result is Figure 12 below:

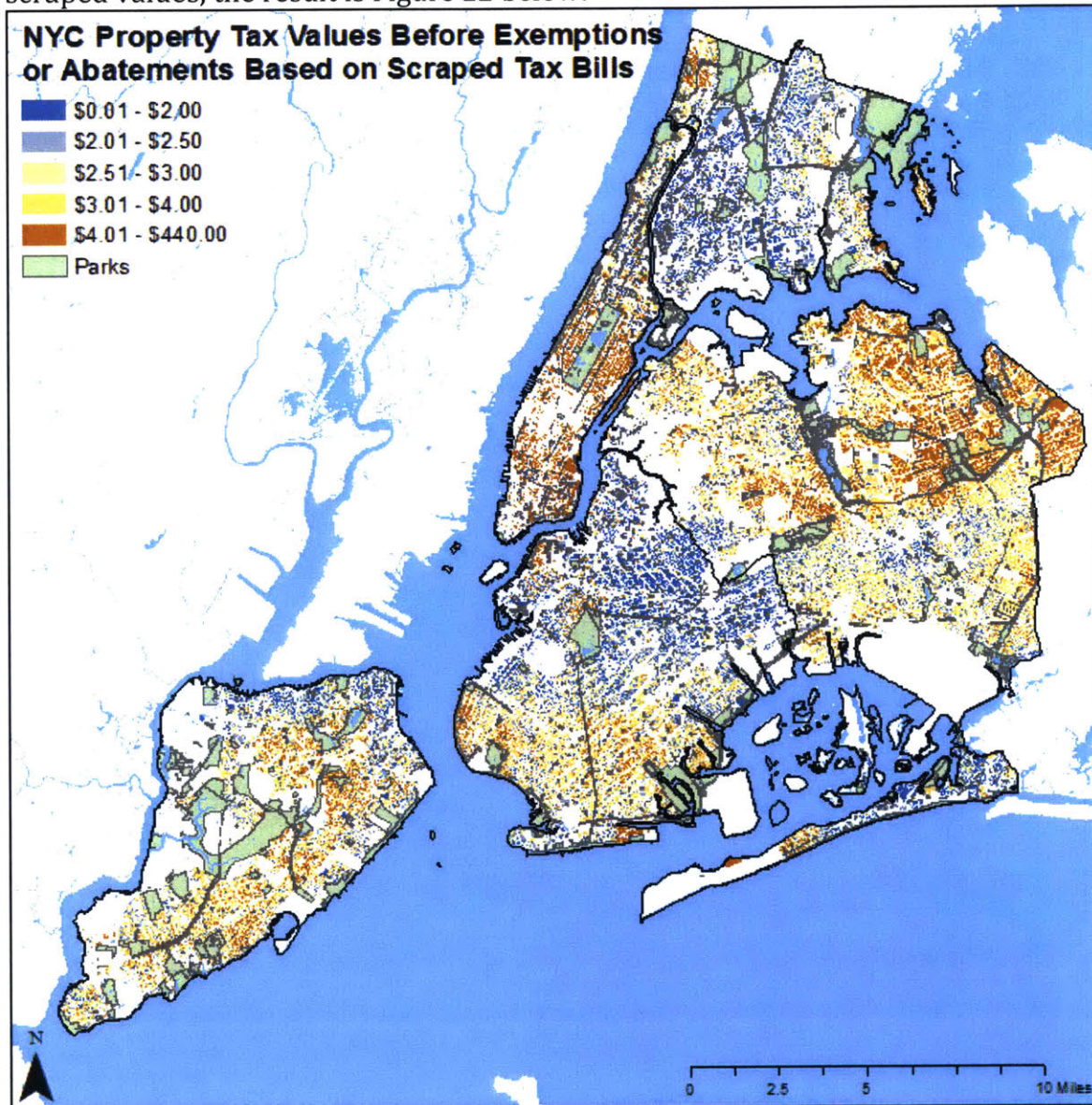


Figure 12. Residential Parcel Map of New York City Property Tax Values per DOF before Subtracting Exemptions or Abatements

Unsurprisingly, Figure 12 looks effectively the same as Figure 11, which depicts assessed values based on the scraped tax bills for Classes 1 and 2. The values per square

foot are clearly different, however the pattern of high and low payments is on par with the assessed values distribution. The same is true of Figure 10 showing taxes before exemptions and abatements based on the calculated values (i.e. market value \times .06 or .45 \times .12855 or .19157).

In essence, Figure 12 is representative of what the property tax distribution would look like under the current system if the complex structure of exemptions and abatements hadn't been implemented on top of it. While most abatements and exemptions were originally designed to mitigate inequalities or improve, in some way, the tax system, many of them have had the opposite effect. As Ruth Ford of CityLimits.org writes, "Every administration since Mayor Edward Koch has attempted to promote some kind of property tax revision, only to fall short—or create new, unintended inequities"^{lxx}.

With these concerns in mind, the next step in the process is to remove exemptions. Figure 13 shows the spatial distribution of the total values of these tax reductions per building for 2015:

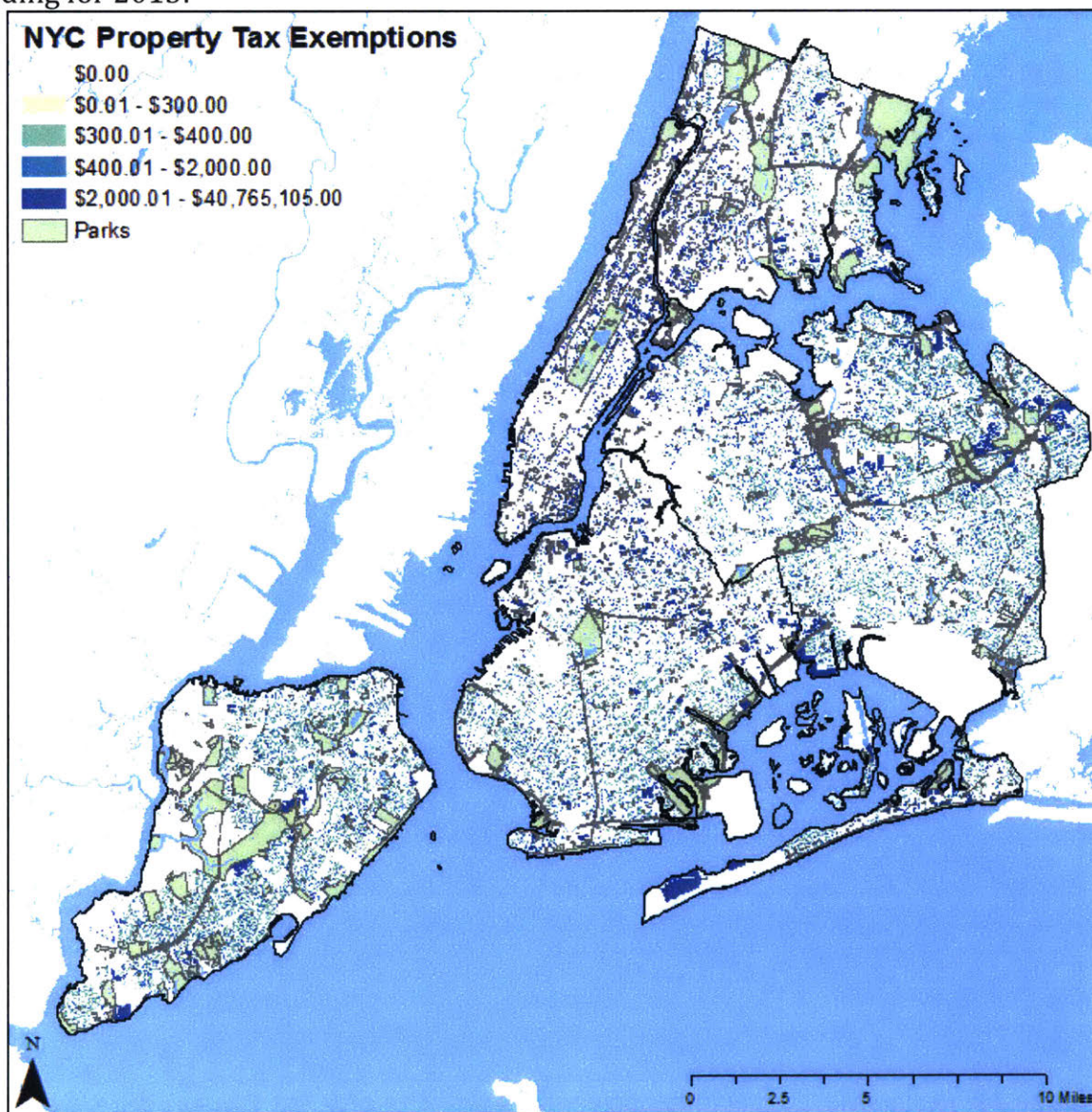


Figure 13. Residential Parcel Map of New York City Property Tax Exemptions per DOF

The exemptions shown in Figure 13 include the 421a program described previously, as well as j51 (which is both an exemption and an abatement), the New York State School Tax Relief Program (STAR), and special programs targeting homeowners that qualify as disabled, veterans, senior citizens, clergy, and/or disabled crime victims. Based on the scraped tax bills, property tax exemptions in 2015 amounted to \$2,001,912,028. In purely numeric terms, the vast majority of these benefits accrued to Class 1 properties primarily due to the fact that there are considerably more of them than there are Class 2 buildings. Conversely, due to the buildings' larger size, the more substantial financial benefit in fact went to Class 2.

As illustrated in Figure 14 below, exemptions have a significant impact on taxes with increasing patches of blue emerging across Manhattan, Brooklyn, and Queens. Surprisingly, and contrary to what many critics have claimed, exemptions seem to benefit both Class 1 and Class 2 properties, decreasing their tax burden per square foot, in some instances by a substantial margin.

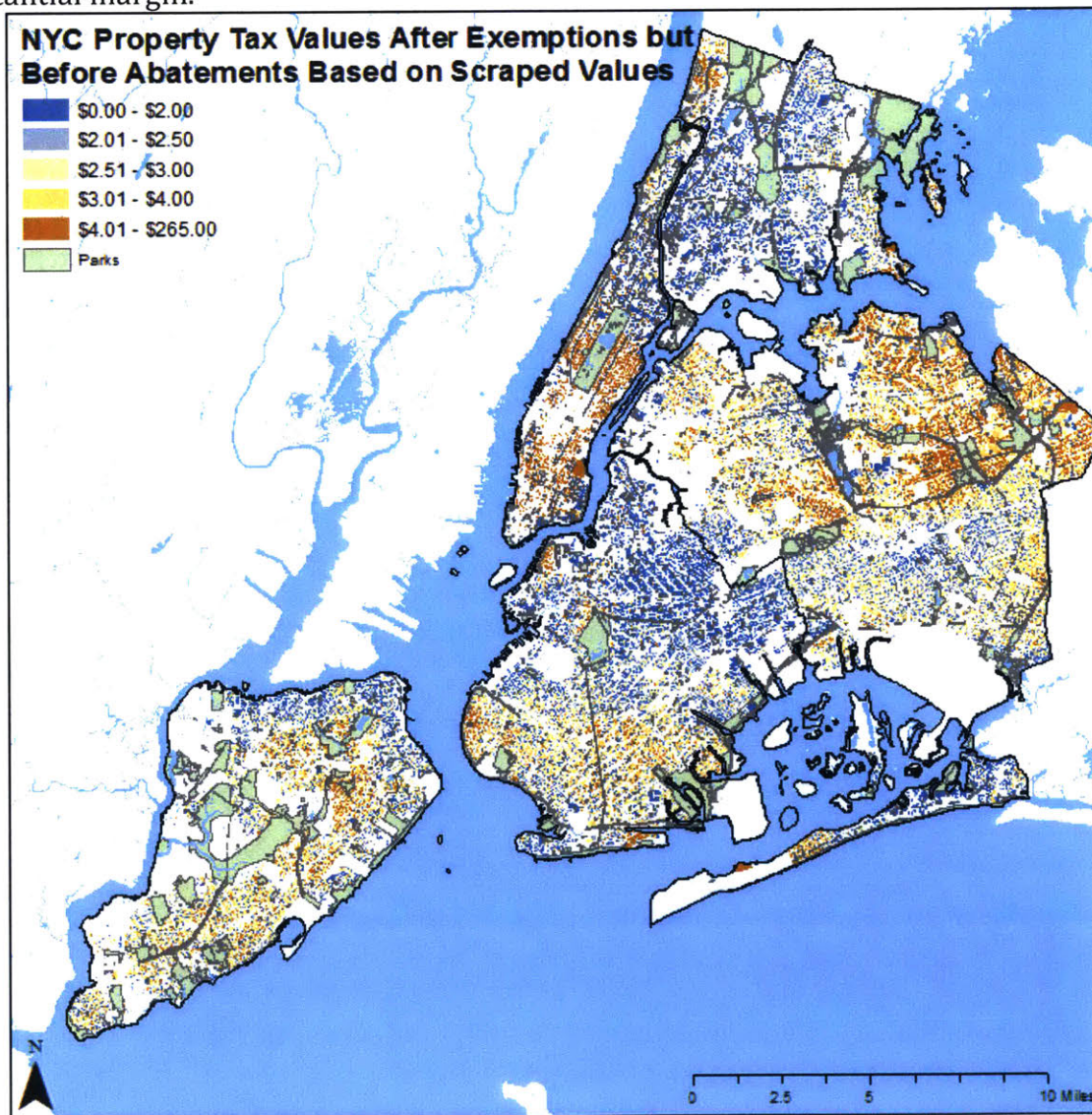


Figure 14. Residential Parcel Map of New York City Property Tax Values per DOF after Subtracting Exemptions but before Factoring in Abatements

The next step in the process of calculating property tax payments is to subtract abatements from the resulting tax bill. While in total, there are nearly 150 exemptions that can apply to properties from Class 1 to Class 4 across the City, there are only eight distinct types of abatements: the co-op and condo abatement, the j51 abatement, the Residential Conversion Abatement, the Industrial and Commercial Abatement Program, lease abatements, the Brooklyn Bridge Park Pilot, the Solar Electricity Generating System Abatement, and the Mitchell-Lama STAR Benefit. Clearly however, not all of these are relevant to this analysis.

Residential abatements in 2015 totaled just \$399,553,898 based on the scraped tax bill data. Accordingly, visualized below in Figure 15, abatements have a considerably smaller spatial footprint as compared to Figure 13 depicting exemptions. The ultimate impact however, is similar to exemptions whereby homeowners receive quantitatively more abatements than Class 2 properties, while Class 2 properties reap more financial benefit due to their larger square footage.

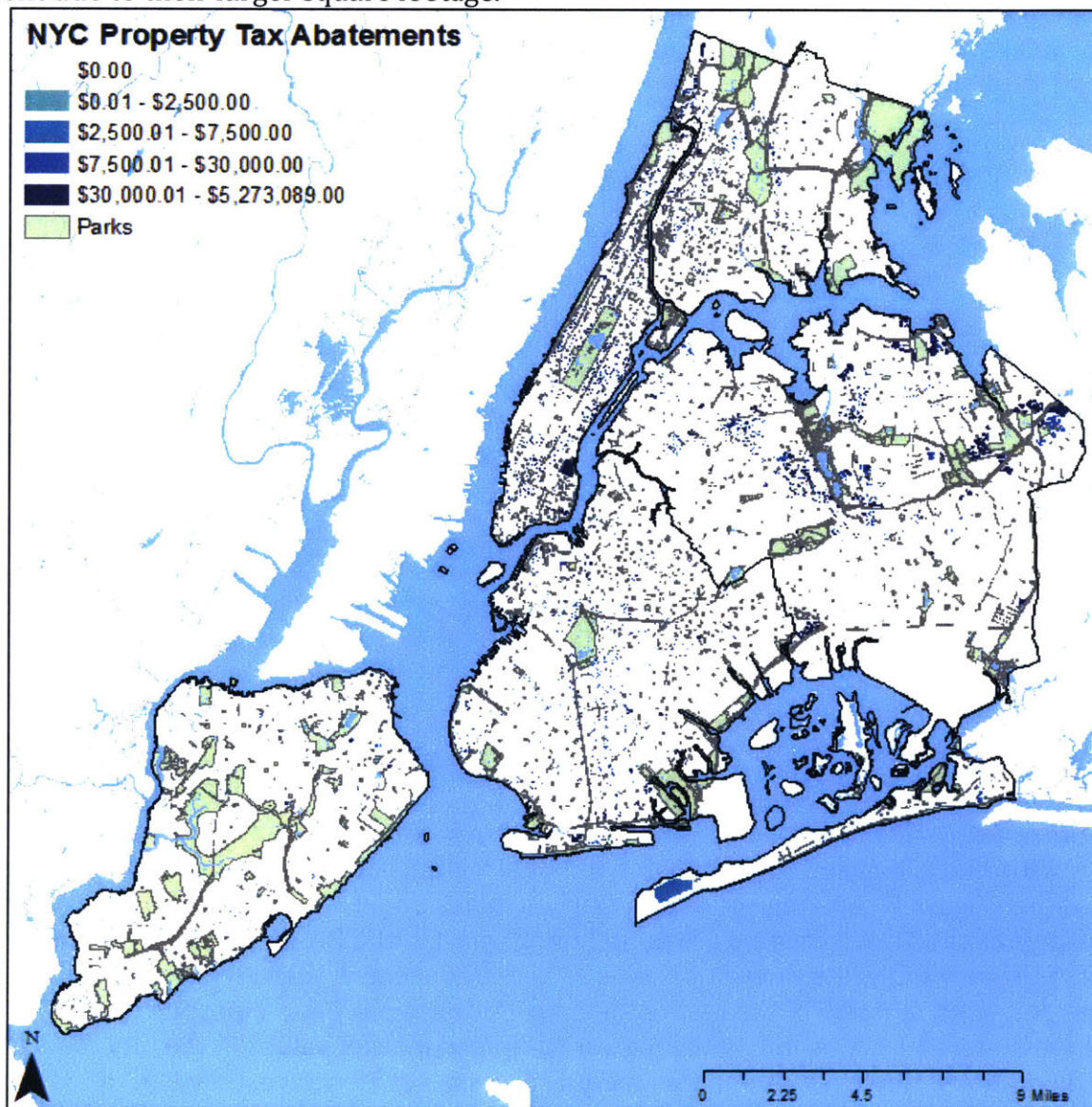


Figure 15. Residential Parcel Map of New York City Property Tax Abatements per DOF

Resultant Property Tax Payments

Now, after estimating market value, then assessment value, then taxes billable, then subtracting exemptions and finally abatements, what is the actual outcome for the City in spatial terms? Figure 16 shows the final map of tax payments based on the 2015 scraped tax bills from the Department of Finance:

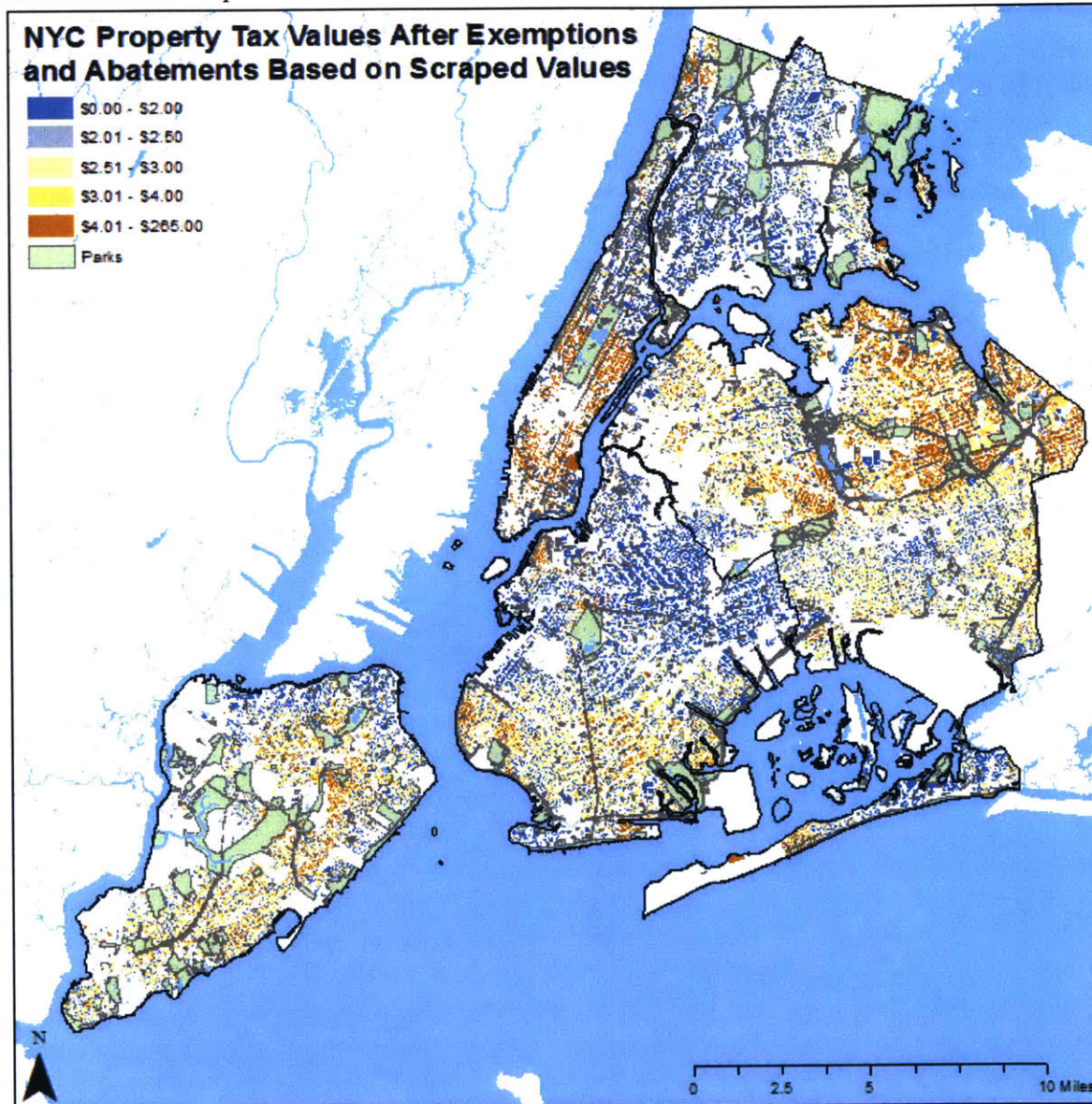


Figure 16. Residential Parcel Map of New York City Final Property Tax Values per DOF

Ultimately, Figure 16 symbolizing the final tax bill data looks considerably different from either Figure 8 showing estimated market values or even Figure 11 showing assessed values. While the lowest income areas, including much of the Bronx and some northeastern parts of Brooklyn have the lowest tax bills as is to be expected, there seems to be little rhyme or reason to much of the rest of the map. For instance, Class 2 properties in Manhattan start off with some of the lowest estimated market values in the City. This is already dubious. However, due to the unequal assessment structure, they end up with some of the highest tax bills. Manhattan is already an expensive place to rent, and with

condos and co-ops not paying their fair share as discussed in Chapter 2, much of the tax burden gets shifted onto these rental properties, making it even more unaffordable.

In his article 'Heights of Privilege', author James A. Parrott notes, "Since property is usually taxed in relation to its value, the wealthy ought, in principle, to pay more. In practice, however, the ratio of property taxes to income invariably declines as you go up the scale. That's the definition of a regressive tax" (14)^{lxxi}. He notes that as a percentage of income, middle-income households pay property taxes that are four times higher than the wealthiest 1%; the poorest fifth of households pay property taxes five times higher. Renters trying to stay in their rapidly appreciating Manhattan and Brooklyn neighborhoods are therefore paying proportionally more for the same services than their wealthier counterparts. Under the current system of skewed valuations and assessments, it is only a matter of time before these inequities begin infiltrating the stronghold of rental housing in the Bronx as well.

Taking a step backward, Figure 17 below depicts what the distribution of tax values per square foot would look like if the City followed the process they publicize in regards to calculating assessment values. This visualization takes the map in Figure 10 above and assumes that all exemptions and abatements still apply.

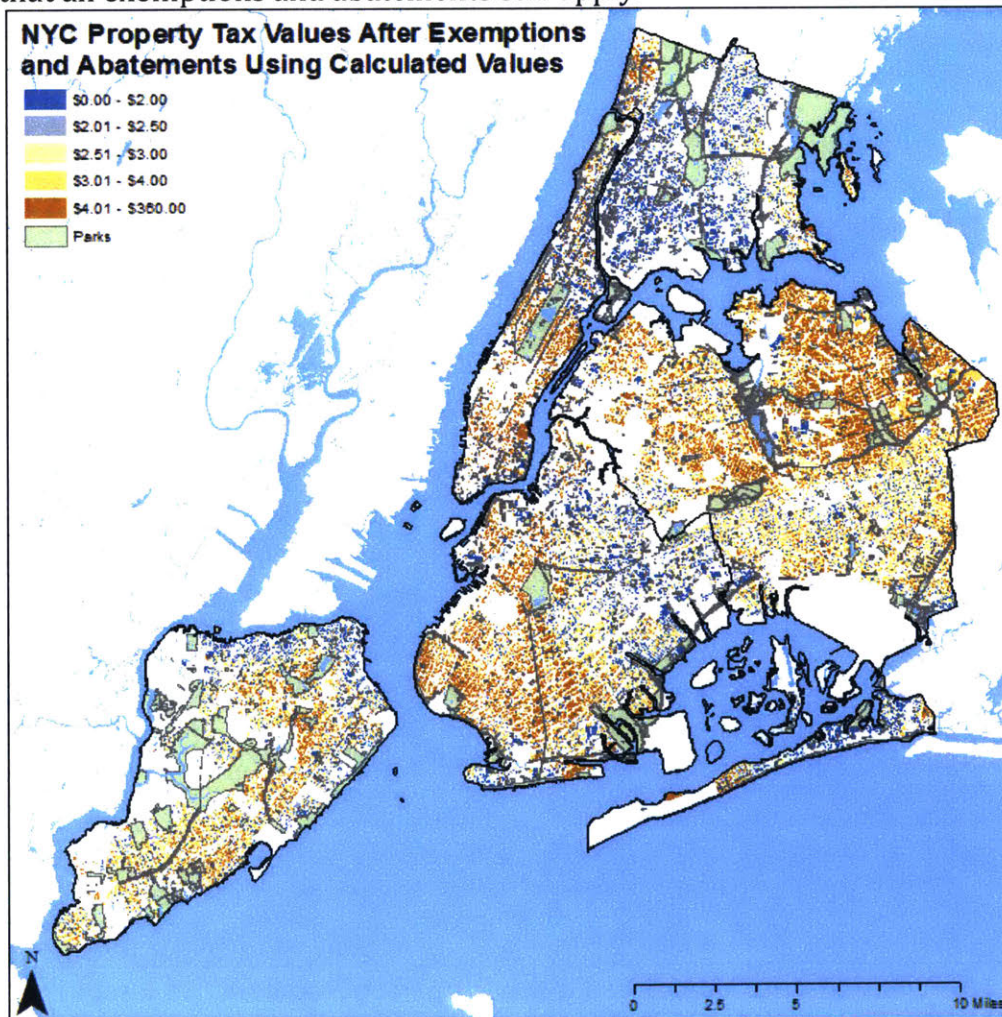


Figure 17. Residential Parcel Map of New York City Final Property Tax Values Calculated Based on the Process Described Publicly by the Department of Finance

The difference is considerable. Under this scenario however, the City would be collecting more tax value overall which could allow for tax cuts across the board, or at the very least some relief for struggling renters, rather than selective cuts favoring homeowner households as is the case presently.

Spatial Distribution of Services

As a final examination of the system as is, this research touches briefly upon the distribution of City services that are funded through property taxes. While it is challenging to tease out borough-specific totals of social services funding across the City, nearly one-third of current property tax revenues are spent on education^{lxxii}. Accordingly, Figure 18 illustrates the annual school spending per pupil by district, in order to visualize whether higher property taxes are mirrored in higher school spending.

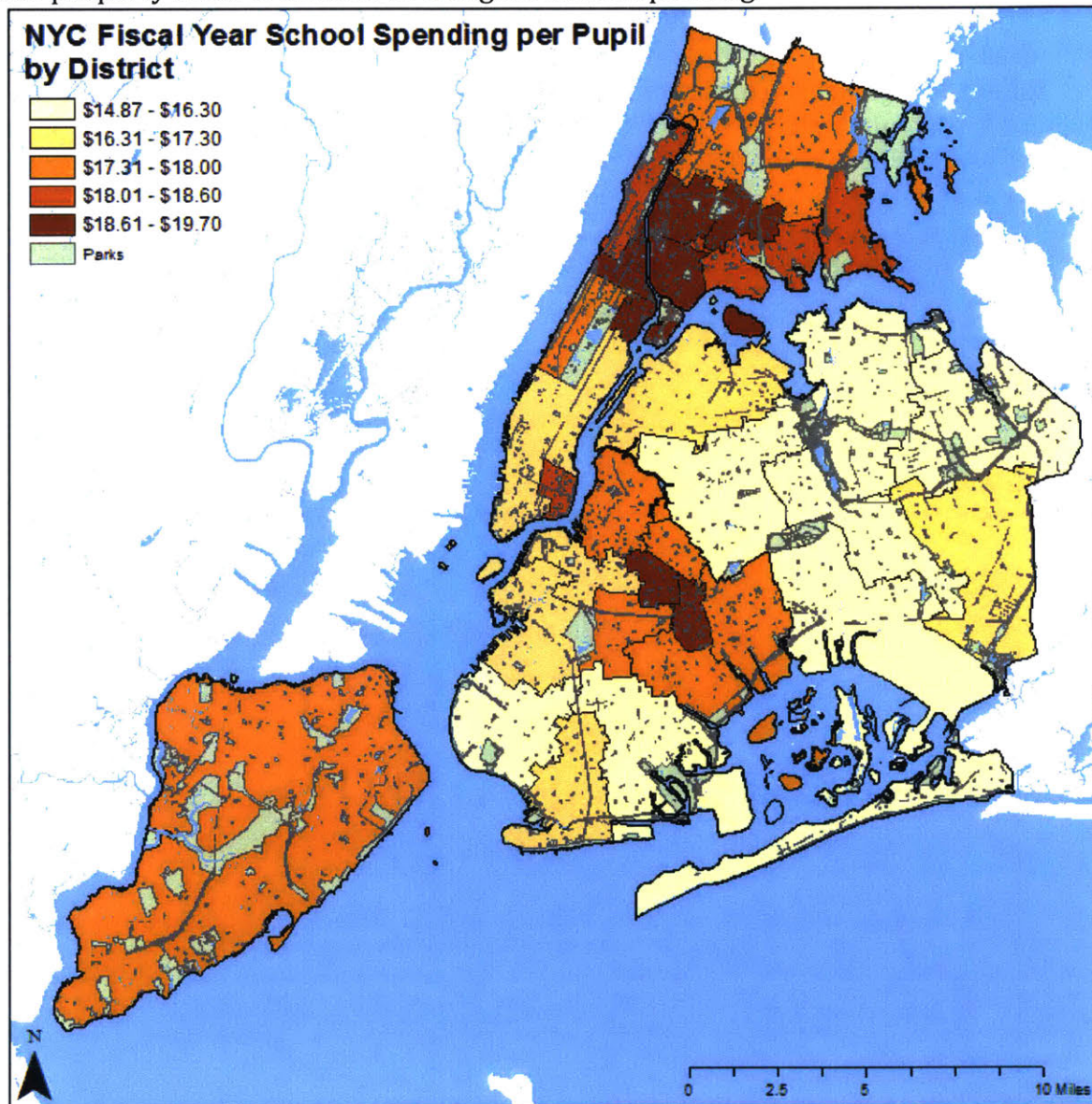


Figure 18. School District Map of New York City Symbolized based on Fiscal Year School Spending per Pupil

In fact, school spending and property tax payments appear to be effectively inversely related. This makes sense from a social policy standpoint, i.e. lower-income areas need more school funding which is provided through subsidization by higher-income neighborhoods. From a purely financial standpoint however, it is somewhat counter-intuitive. Moreover, it is interesting that little protest has been raised around this issue, lending further support to the idea that City residents are largely unaware of the actual workings of the property tax system.

Conclusion

Ultimately, the property tax system has proven difficult to reform for a reason. For the time being, it is a zero-sum game; any reductions awarded to one class inevitably signal increases for another. Accordingly, when low-income homeowners are taxed at the same rate as wealthy foreigners who buy condos for their investment potential, placing the burden of higher taxes on the former in order to relieve struggling renters is a questionable policy decision.

What is clear however, is that the current system is not working. Assessed values should not be so poorly aligned with market values. Caps should not deliver benefits to disinterested gentrifiers while failing to protect the communities who made the neighborhoods desirable in the first place. While a path to reform will be a contentious one, the status quo will only grow increasingly untenable as land becomes scarcer, people paying high rents fail to accumulate wealth in order to buy, and skyrocketing home prices push ownership increasingly further out of reach.

In light of this urgency, the next two chapters seek to examine options for reform and then to outline a tentative implementation plan. The objective is to demonstrate ways in which it might be possible for the City and State governments to come together to do better for the people of New York City. If the goal of the current administration is to increase and expand affordable housing opportunities, adapting the property tax to serve renters as well as homeowners is an important step.

IV. Spatial Analysis of Policy Reform Options from the Literature

The text up until this point has been focused on describing the current property tax structure and its outcomes on New York City residents. Ultimately however, this research aims to be more forward-looking; rather than simply arguing that the existing system is flawed and needs revision, these final two chapters examine what change might actually look like and how to get there. Accordingly, this chapter takes several reform proposal scenarios from the literature and models how they might play out spatially across the five boroughs. It begins with a review of the ideas drawn from the literature, discussing the costs and benefits, and then moves into mapping and analysis.

Reform Proposals from the Literature

In its Issues and Options Discussion Brief #13, the Center for Research, Regional Education and Outreach (CRREO) at SUNY New Paltz proposes a number of property tax policy changes, ranging from high-level advice such as providing more transparency for renters, to removing the assessment caps on Class 1 and Sub-Class 2a to align them instead with the transitional value phase-in schedule applied to the rest of Class 2. Additionally, they recommend: 1. Using sales prices to value cooperatives and condominiums rather than valuing them as rental buildings (but with the stipulation of a ten-year phase-in period to avoid sudden spikes in tax bills); 2. Instituting a single tax rate for all properties; and/or 3. Instituting a two-class system rather than the existing 4-class system, which would subject all residential property to one tax rate, and then all other property in the City (i.e. Classes 3 and 4) to another rate. The Center estimates that by using a single tax rate across the City, revenues from Class 1 properties would ultimately increase by \$3.6 billion (\$5,200 per unit). Their share of the levy would rise from 13.9% to 40.8% in line with their citywide share of market value. Co-ops would see a \$2,482 per unit increase in annual payments, while condos would get a \$4,501 per unit increase. Conversely, large rental properties with elevators would receive an annual tax cut of \$1,513 per unit, and smaller walkups would experience a \$1,042 reduction per unit. The authors also project that this change would spur additional rental property development.

The two-class system proposal would keep total revenue the same, and would further maintain neutrality by ensuring that each of the two new classes paid the same amount as the total contributions of the two constituent classes. In other words, combining Classes 1 and 2 under this system would require that their total contribution be equal to the sum of what Class 1 currently pays and what Class 2 pays. This requirement would also apply to combining Classes 3 and 4. The rates for the two new Classes would be obtained by taking the total tax revenue assigned to each based on current shares, and dividing that figure by the total market value of the properties within each Class. Using full market values and a single tax rate for all residential properties would result in a 72.9% increase for Class 1 properties (approximately \$2,039 per parcel). Similarly, Class 2C buildings that consist of one- to four apartments would receive a 62.4% increase (approximately \$2,501 per parcel). Condos and co-ops in large buildings would see increases of 15.8% and 16.5% respectively (or \$751 and \$428 per unit). In exchange for these increases, large rental buildings with elevators would receive a 78.7% reduction, i.e. \$1,854 per apartment, while walk-ups would get an 81.2% reduction (\$1,237 per unit). While this may seem like a reasonable move towards equalization, the authors note, "Ironically, the goal of reform for New York City in this option—a two class system with fixed shares of the pie for each class

and no cap on tax liability growth within classes— is the very system that many upstate jurisdictions are interested in containing, or ending” (19)^{lxxiii}.

Similarly, the Independent Budget Office (IBO), in their report on the outcomes of S7000A, propose instituting a single tax rate for all property types, a two-class system based on residential versus other uses, or a two-class system based on purpose of ownership. Their findings mirror those of the CRREO, in that a single tax rate would increase the levy on Class 1 by 190.4%, the benefits of which would primarily be reaped by large rental buildings. Their findings on the two-class system based on property type also reinforce those described above. Finally, the proposal of a two-class system that is instead based on whether the property is owned for personal use versus investment could play out in a number of ways depending on how exactly the two categories are defined. While the personal use tax rate would be lower than that proposed for the single tax rate policy, the investment use category would be taxed at nearly three times their projected tax level under a single rate system. This change would ultimately result in higher tax bills for Class 1, as well as Sub-Class 2c, and Class 2 elevator buildings (although the last category would only see a marginal increase). Sub-Classes 2a and 2b would both see significant reductions. As mentioned previously, the report also highlights five critical issues to consider in evaluating any potential reform proposal, those being: 1. transition (phase-ins over time); 2. capitalization (recognition that changes in tax rates will impact market values); 3. phasing in value changes; 4. class shares (align shares of the levy with changes in the shares of market value); and 5. property owners’ ability to pay^{lxxiv}.

Furthermore, in the article ‘Heights of Privilege’, the author notes that some condos in upscale neighborhoods of Manhattan have effective tax rates that are one-third that of condos in parts of the Bronx. In efforts to remedy this issue, he writes that:

“One [reform] proposal calls for a graduated 4 percent tax on the true market value in excess of \$5 million on co-ops and condos owned by nonresidents. Although it would only apply to the top 2 percent or so of non-resident-owned New York City apartments, the tax would generate \$300 million to \$400 million a year—enough to cover most of the cost of universal pre-kindergarten in the city.” (16)^{lxxv}

Other recommendations include 1. Instituting circuit breakers, which protect and provide relief to low-income households whose property tax bills make up a substantial portion of their income (31 states and Washington, D.C. already employ this approach in some form); 2. Implementing graduated real-estate transaction taxes with rates that increase as property taxes do; 3. Charging a pied-a-terre tax to ensure that nonresidents contribute to the City that maintains their property values; and 4. Considering a land value tax to enable the City to recapture some revenue from real estate developers’^{lxxvi}.

In an analysis entitled ‘Options for Property Tax Reform: Equitable Revenue Raising Reforms for New York City’s Property Tax’, the Citizens Budget Commission proposes pursuing one of three options. The first is merely designed to increase revenues, and suggests proportionally increasing the nominal tax rate across all Classes in order to account for any budget shortfalls. This of course has the downside of perpetuating existing inequities. The second option brings all homeowners together into one Class by valuing condos and co-ops using sales prices (rather than as income-generating buildings using rental comparables) then assessing them at the Class 1 ratio of 6%. Subsequently, the City would increase the tax rate specifically for this new combined Class 1 in order to raise revenues while simultaneously decreasing taxation disparities between homeowners and

renters. All caps and phase-ins on homeownership properties would also be eliminated under this proposal. The final option for reform described by the Citizens Budget Commission is to eliminate caps and phase-ins for all properties. In 2015, the amount of foregone revenue due to these tacked-on policies was \$4.5 billion. This proposal would eliminate both within-Class inequalities among Class 1 properties and between-Class disparities particularly for Classes 1 and 2^{lxxvii}.

Elsewhere in the literature, the circuit-breaker receives further support, as does the prospect of allowing homeowners to defer tax payments until they either relinquish control of the property by some means, or they pass away, at which point the unpaid taxes would be collected through a lien placed on the home^{lxxviii}. Another policy put forth for amendment is the 'Scaffold Law,' which places excessive liability on property owners and contractors during periods of construction, forcing them to pay high insurance fees that then necessitate property tax breaks to ensure development still proceeds. To sum up all of these proposals, the Deputy Director of the New York City Independent Budget Office, in testimony on New York City's property tax system to the New York State Assembly Committee on Real Property Taxation in 2016 stated:

"In recent decades the city has offered tax incentives to spur commercial and apartment development in part to help offset the high tax burden of these properties. An alternative approach to relying on tax incentives would be to bring more of the value of residential property into the tax base, which would allow for a reduction in the overall tax rate and remove some of the pressure to offer incentives." (5)^{lxxix}.

The existing multi-layered structure that excludes such a considerable amount of the City's real estate value from taxation is preventing the City from effectively generating revenues and moving forward in an equitable direction.

One Citywide Tax Rate

This analysis seeks to examine what would happen if some of the aforementioned reform proposals were implemented. Assigning valuations to every condo and co-op in the City based on sales price is outside the scope of this analysis, as is determining the ownership status of all parcels across the five boroughs. Therefore, this research focuses primarily on the effects of shifting away from the four-class system, eliminating exemptions and abatements, and levying taxes on full market values.

The first investigation looks at the IBO and CRREO's proposal of transitioning to a single tax rate for every parcel in the City. Figure 19 below takes all properties across the existing four Classes and applies a new standardized tax rate of 7.4208% to the assessed values from the scraped tax bills. The tax rate was calculated by dividing the City's total property tax needs for 2015 (sum of the property tax values from the scraped tax bills) by the sum of the assessed values. Property tax payments totaled \$18,032,615,784 in 2015. The sum of the assessed values was \$1,338,161,152.58.

Figure 19 shows that under a single citywide tax rate, the vast majority of properties would be pushed into the lowest bracket of tax payments per square foot, save for some large commercial properties and the buildings with high market values in Manhattan. This stands in stark opposition to the current property tax payment map where the distribution is much more varied and is not well-aligned with land values. In addition to being more representative of actual market prices, this system would make it possible to streamline the administration of the tax system, as well as increase transparency for renters, which was a key recommendation of CRREO. This visualization excludes any existing exemptions

and abatements, as applying them would only serve to distort what is intended to be a simplification.

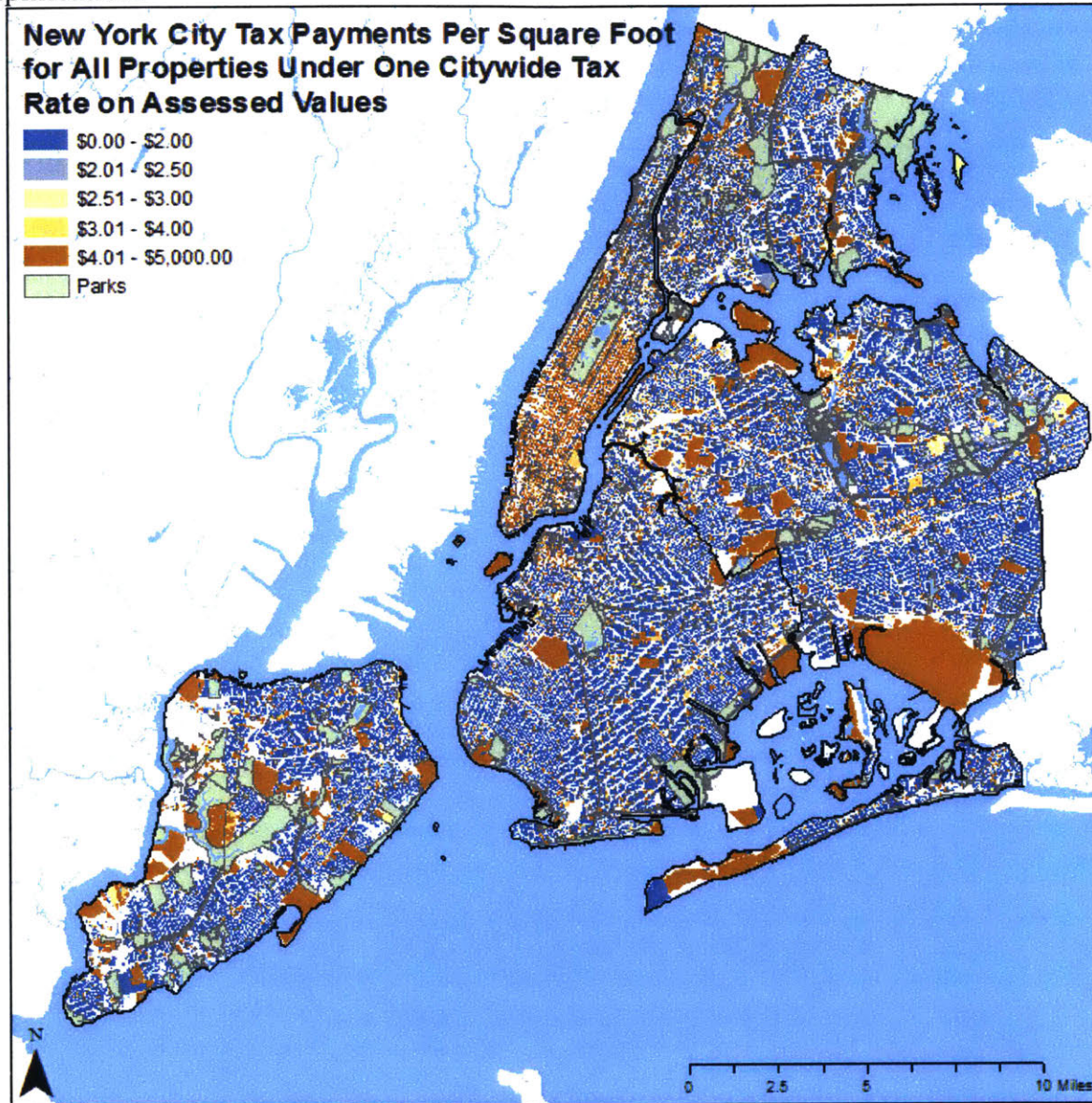


Figure 19. Parcel Map of All NYC Properties Showing Estimated Property Tax Values Under a System in which All Properties Are Taxed at a Single Rate on Assessed Values

While Figure 19 in and of itself provides for some interesting conclusions, it is somewhat less compelling than viewing the results of a comparison between old and new. Figure 20 depicts the difference between each property's current tax rate per square foot, and its new tax rate under the proposed single rate system. The parcels symbolized in yellow would see an increase from their current tax bill, while the entire rest of the City, shown in varying shades of blue, would see a reduction in their tax bills per square foot. Despite being taxed at the highest rate in Figure 19 above, Manhattan apartment buildings would in fact see some of the deepest tax cuts of any properties under this new policy framework.

Ultimately, property taxes are a zero-sum game so some properties will inevitably see increases. For a subject that is supposedly so politically intractable however, the single tax rate seems to be a reasonable option as even single-family homeowners would see a decrease in their tax bills. The widespread impact of these cuts could be a huge boon to low-income owners and renters in a City that is becoming increasingly unaffordable, partially as a result of the convoluted and inequitable property tax system.

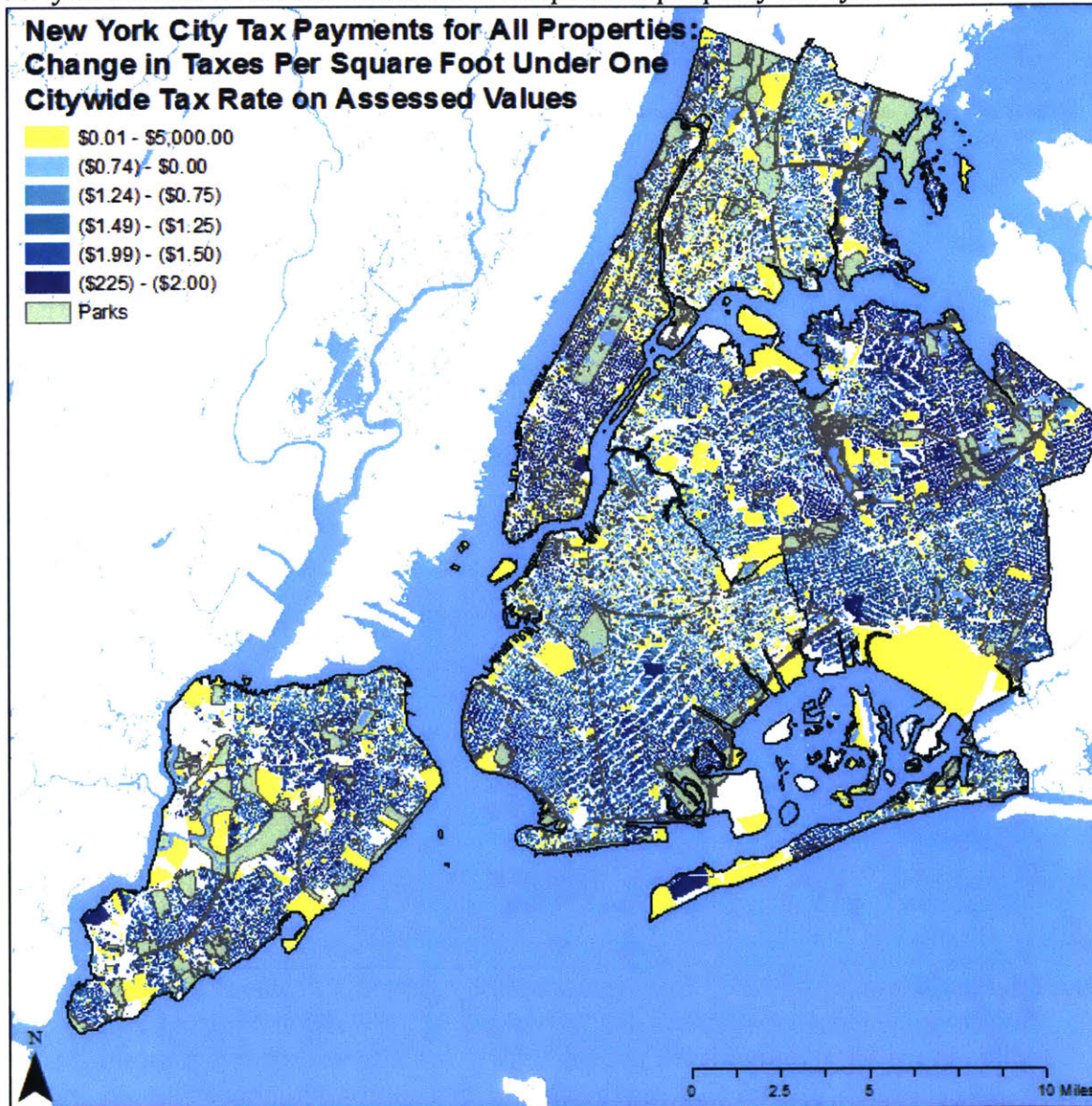


Figure 20. Parcel Map of All NYC Properties Showing the Change in Property Tax Values Under a System in which All Properties Are Taxed at a Single Rate on Assessed Values

While all of this theoretically sounds positive, this incarnation of the single tax rate policy option actually maintains some of the existing discrepancies by relying on the current system of assessed values. Recall that Class 1 properties are taxed on 6% of their estimated market value, while Classes 2-4 are all taxed on 45% of their market values. This leads to the aforementioned disparities between the tax bills of Class 1 properties and the rates for every other building in the City.

Accordingly, the next two visualizations examine what a single tax rate system would look like when applied to full market values per the Department of Finance’s estimates, rather than assessed values. In order to achieve this, the entire property tax total (\$18,032,615,784) was divided by the sum of the estimated market values. This yielded a new citywide tax rate of 1.7614% for all parcels. Unsurprisingly, this option shifts a great deal more of the property tax burden onto currently undertaxed one- to three-family homeowners, in addition to the expensive Manhattan buildings discussed above. Figure 21 depicts a scenario under which virtually all of the trappings of the existing tax system are stripped leaving only the Department of Finance’s estimated market values intact. Essentially, this illustrates a ‘fair’ system whereby all properties are treated exactly the same.

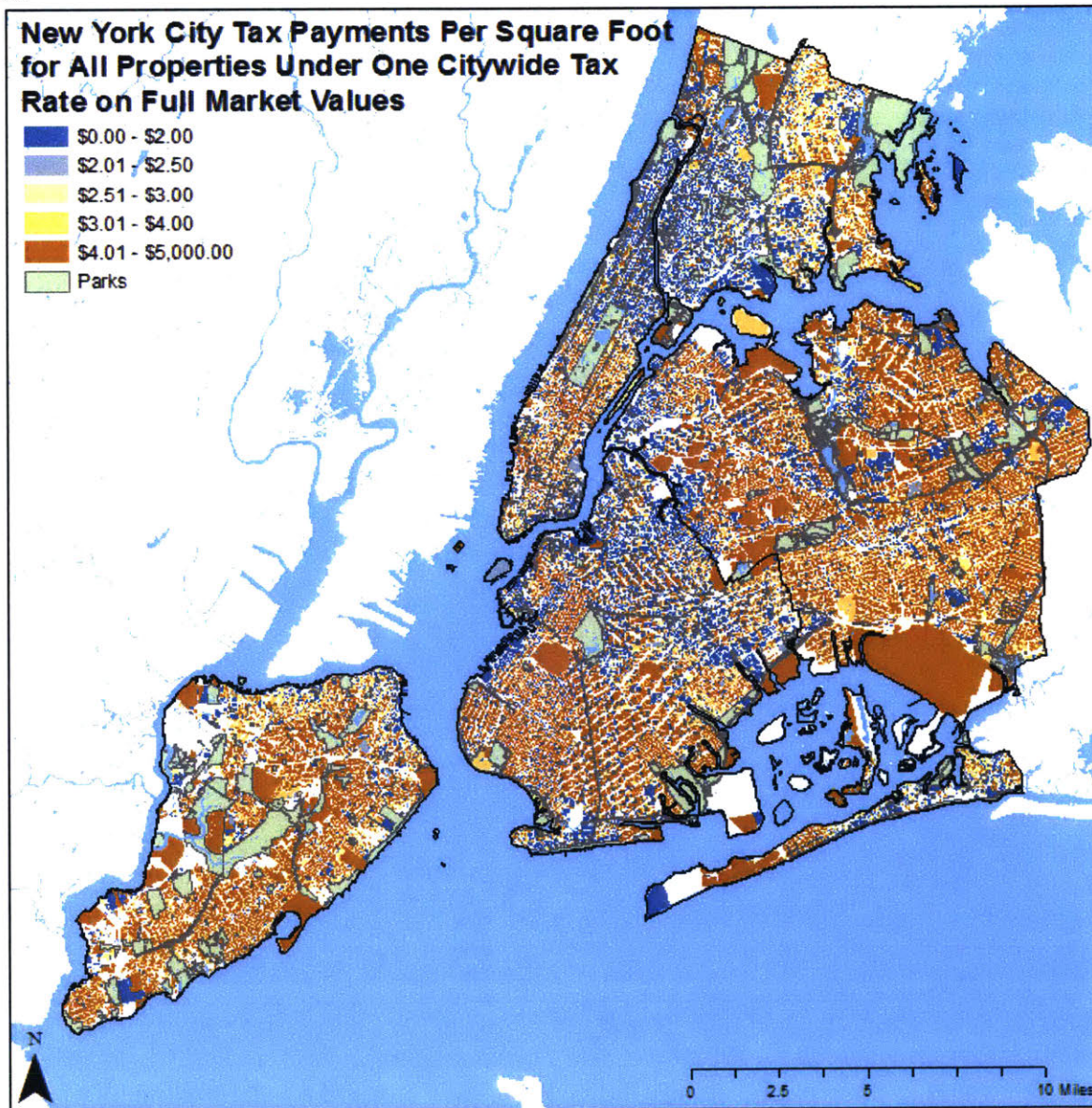


Figure 21. Parcel Map of All NYC Properties Showing Estimated Property Tax Values Under a System in which All Properties Are Taxed at a Single Rate on Full Market Values

Unfortunately, the map of this change as compared to the existing system is somewhat less convincing from a policy implementation perspective. Figure 22 below shows the difference between properties' current tax payments per square foot, and their projected new tax rates under the proposed system. All properties but those depicted in blue will receive tax increases, with many large commercial properties and Class 1 homes seeing a significant bump, and rental properties, especially on Manhattan, experiencing cuts. Increasing the tax rates of homeowners will not be politically popular, making this solution markedly less hypothetically feasible than a single tax on billable assessed value.

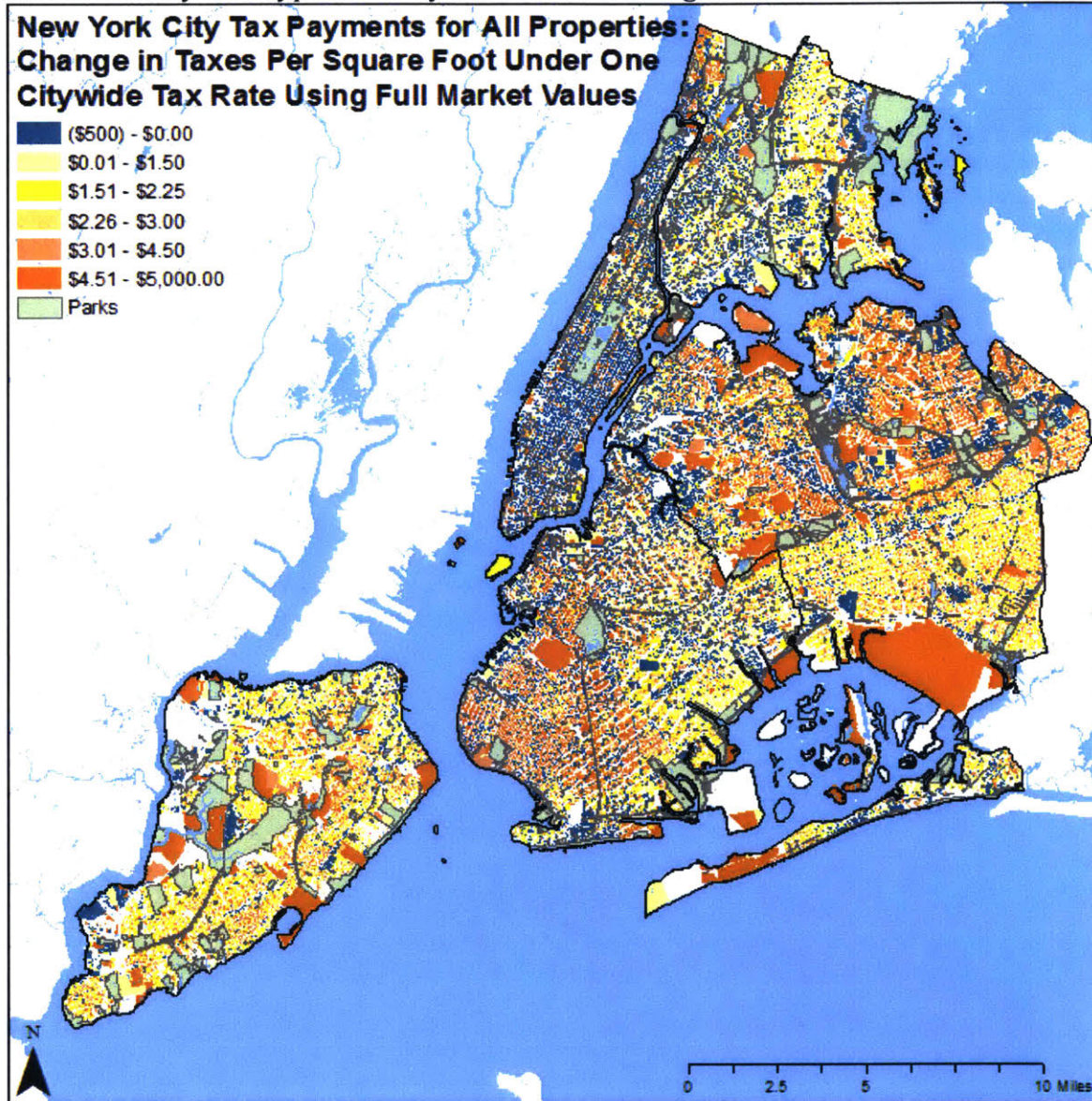


Figure 22. Parcel Map of All NYC Properties Showing the Change in Property Tax Values Under a System in which All Properties Are Taxed at a Single Rate on Full Market Values

The maps in this chapter up until this point have focused on visualizing all of the properties in the City, in order to paint a comprehensive picture of the potential impacts on residents. For example, if many commercial properties were to see large increases in their tax bills, while rental properties only received a small tax cut, the increased prices for

goods and services might counteract any reductions awarded to struggling residents. This analysis however, is focused almost entirely on residential buildings, so the visualizations in the rest of this chapter mirror that focus by excluding Classes 3 and 4.

Accordingly, Figure 23 below similarly visualizes the results of a single tax rate system using assessed values, zeroing-in specifically on residential parcels. Given the low billable assessed values of the many Class 1 parcels in the outer boroughs, it is no surprise that such a proposal yields the following patterns. Using this approach, with a citywide property tax rate of 7.4208%, almost the entirety of the Bronx, Brooklyn, Queens, and Staten Island would have tax rates per square foot that fall into the lowest bracket. Conversely, rental properties on Manhattan are taxed at a high rate per square foot due to the combination of high market values and high assessment ratios. Figure 23 shows that even if almost all of the elements of the existing tax structure were eliminated, there would still be significant inequities between Classes 1 and 2.

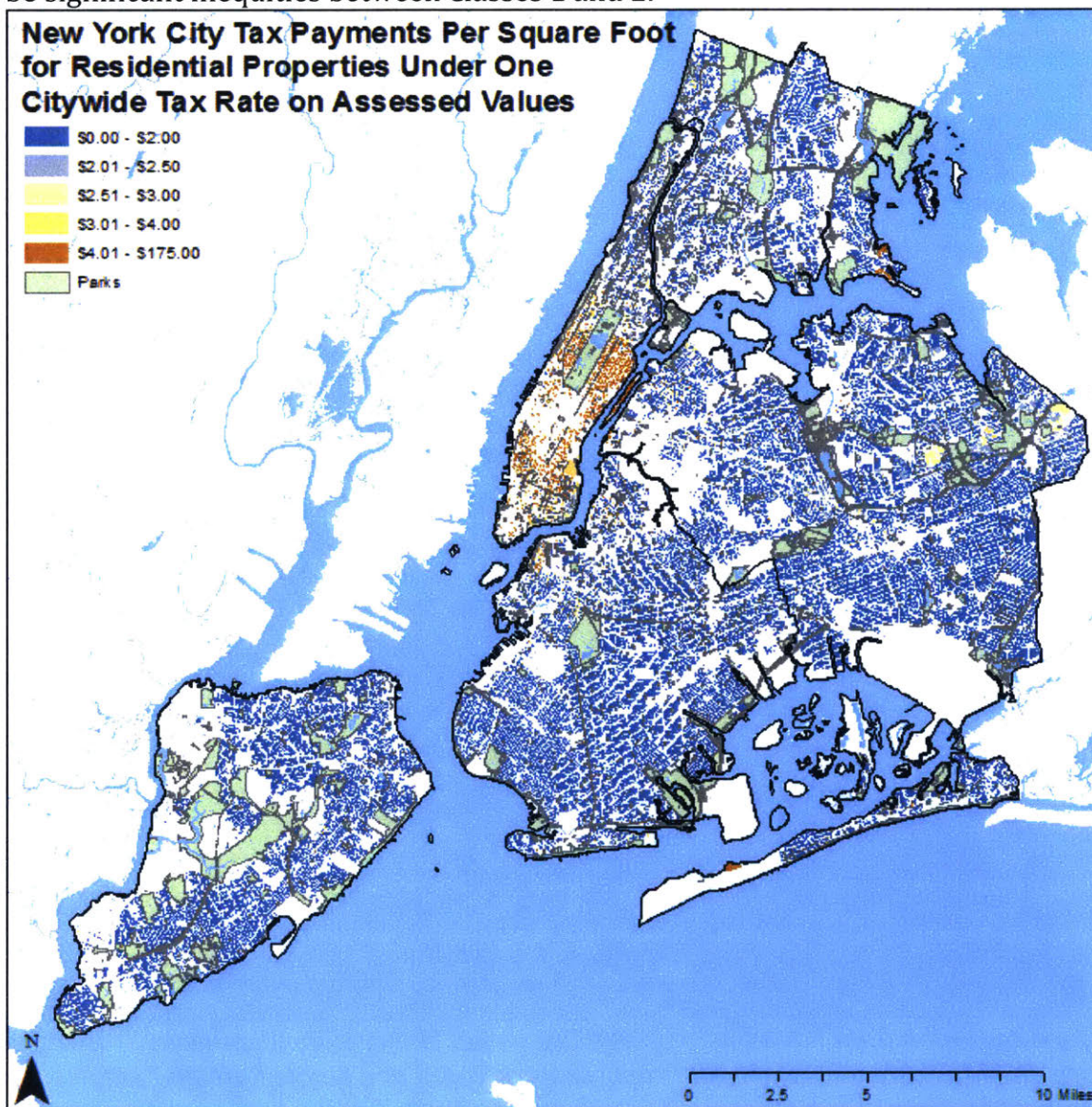


Figure 23. Residential Parcel Map of NYC Properties Showing Estimated Property Tax Values Under a System in which All Properties Are Taxed at a Single Rate on Assessed Values

Figure 24 illustrates the outcome of symbolizing the difference between these new tax payments and current real-world property tax bills, as above. From a political feasibility perspective, the results of this proposal are quite reasonable, as many homeowners in wealthy parts of the City would receive tax cuts. Unfortunately, it looks less favorable from an equity standpoint, as portions of the Bronx, Brooklyn, and northern Manhattan with lower median household incomes would experience increases in their tax bills. Many of these buildings belong to Class 2, whose outsized assessed values as compared to Class 1 and Sub-Class 2 properties prompt these higher tax payments. Accordingly, this policy approach is notably counterproductive as the goal is to relieve renters of their excessive share of the tax burden, not increase their payments.

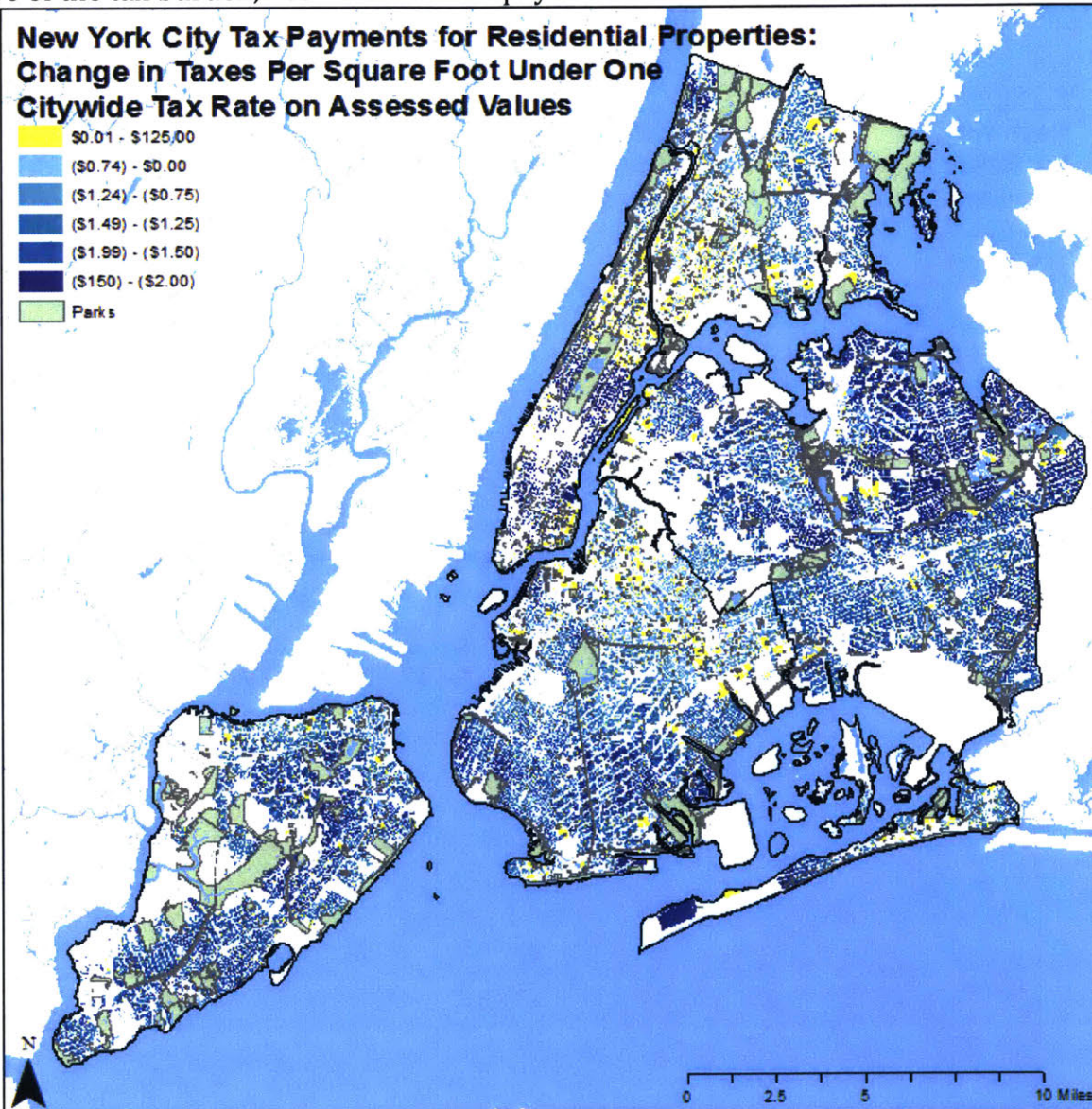


Figure 24. Residential Parcel Map of NYC Properties Showing the Change in Property Tax Values Under a System in which All Properties Are Taxed at a Single Rate on Assessed Values

Reasonably then, the solution should be to do away with assessment ratios and follow New York State law by applying full market values when generating tax bills. As above, this entails applying a tax rate of 1.7614% to all of the properties in the City, the results of which are shown in Figure 25 below. This produces more realistic valuations across the five boroughs, although it pushes the vast majority of residential properties into the highest per square foot tax bracket. It also is not entirely representative of area median income, which means that it could result in severe tax burdens in some areas of Brooklyn and Queens in particular. It is of note that the main concentration of rental properties in the Bronx remains at a low tax rate, as well as northern Manhattan, however the widespread brown coloration across the map bodes poorly both for the upcoming comparison map and for the prospect of political favorability.

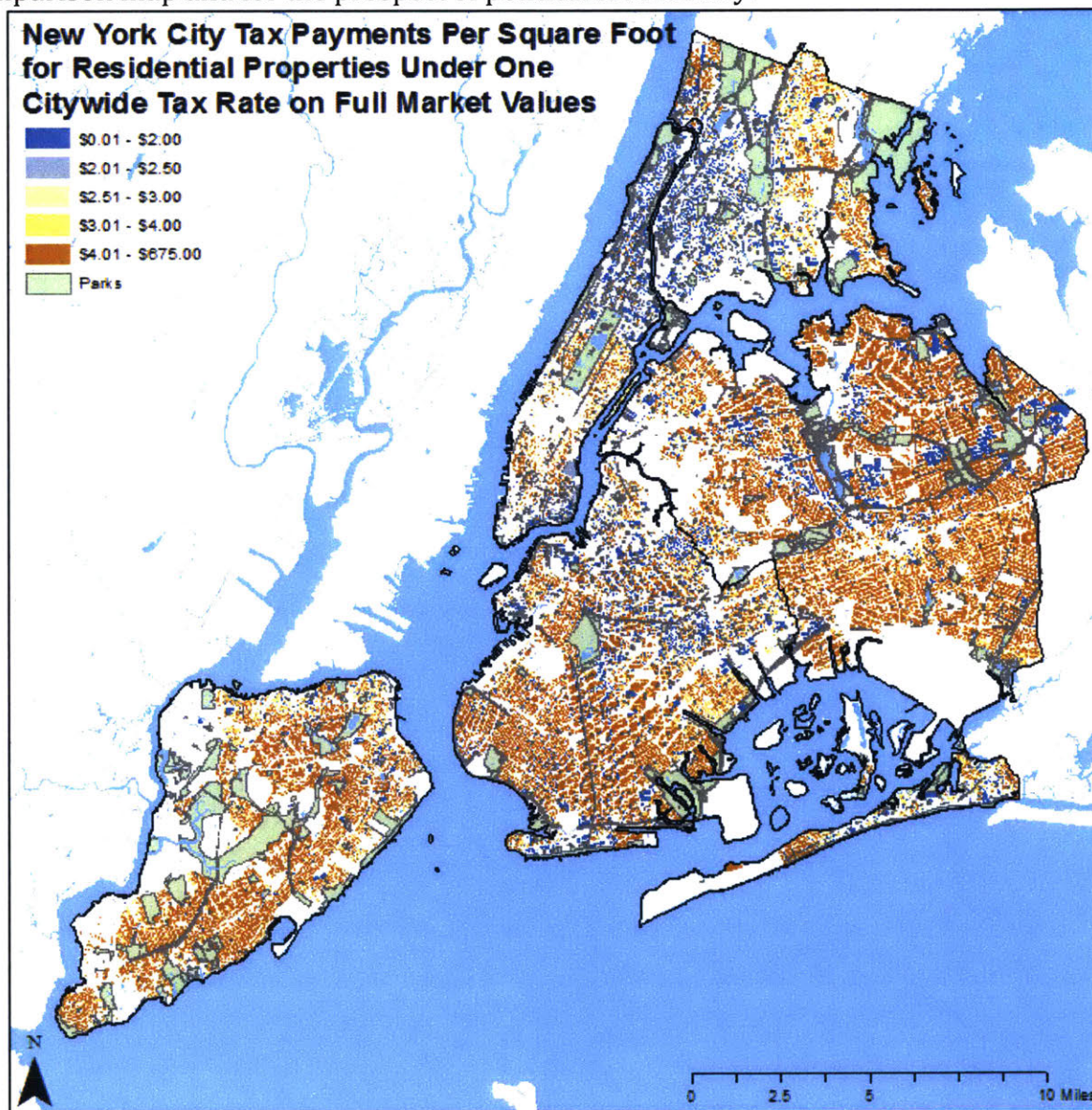


Figure 25. Residential Parcel Map of NYC Properties Showing Estimated Property Tax Values Under a System in which All Properties Are Taxed at a Single Rate on Full Market Values

As suggested above, Figure 26 showing the difference between current taxes and projected taxes for residential properties using full market values under a single citywide tax rate simply serves to highlight the extent of the contortions in the existing system. Under the proposed policy, all but the parcels symbolized in blue would receive an increase in their tax payments per square foot. This includes almost all Class 1 homeowners, with the most significant increases occurring in the wealthier parts of Queens as well as in southwestern Brooklyn. The large grouping of Class 2 buildings on Manhattan would be among the few parcels to see a decrease, while the Bronx would experience more mixed results. Effectively, this point is moot as such a widespread tax increase on residents would be unlikely to even be proposed, despite perhaps representing a more equitable configuration than the existing system of caps, phase-ins, exemptions, assessments, etc.

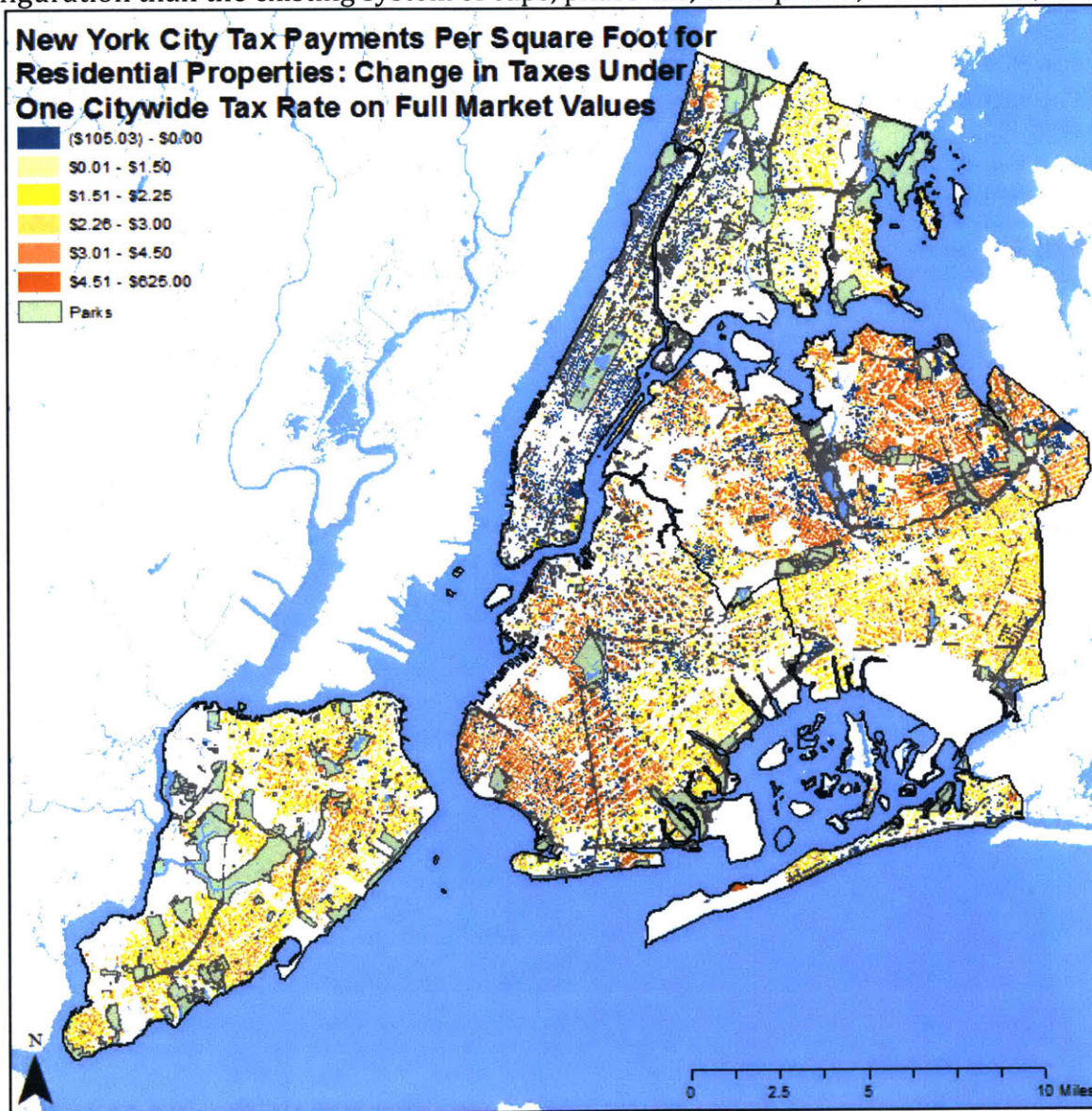


Figure 26. Residential Parcel Map of NYC Properties Showing Change in Property Tax Values Under a System in which All Properties Are Taxed at a Single Rate on Full Market Values

Two Tax Rates: Residential & Everything Else

Another proposal from the literature is to apply two tax rates across the City, one for Classes 1 and 2, and another for Classes 3 and 4. This would help to mitigate Class inequities between small homeownership properties and large rental buildings. The sum of the property taxes levied on Class 1 and 2 properties in 2015 was \$9,831,156,974. Dividing the total assessed values by this figure yields a Class 1 and 2 tax rate of 11.4699%. Figure 27 below represents the tax payments per square foot under a two-class taxation system using billable assessed values from the scraped tax bills as determined by the Department of Finance. It shows that under this system, the majority of residential properties would once again fall into the lowest tax per square foot bracket. Properties with especially high market values, e.g. in northeastern Queens and in Manhattan, would see higher tax bills accordingly. This seems to be the most reasonable outcome of those examined thus far considering all financial factors.

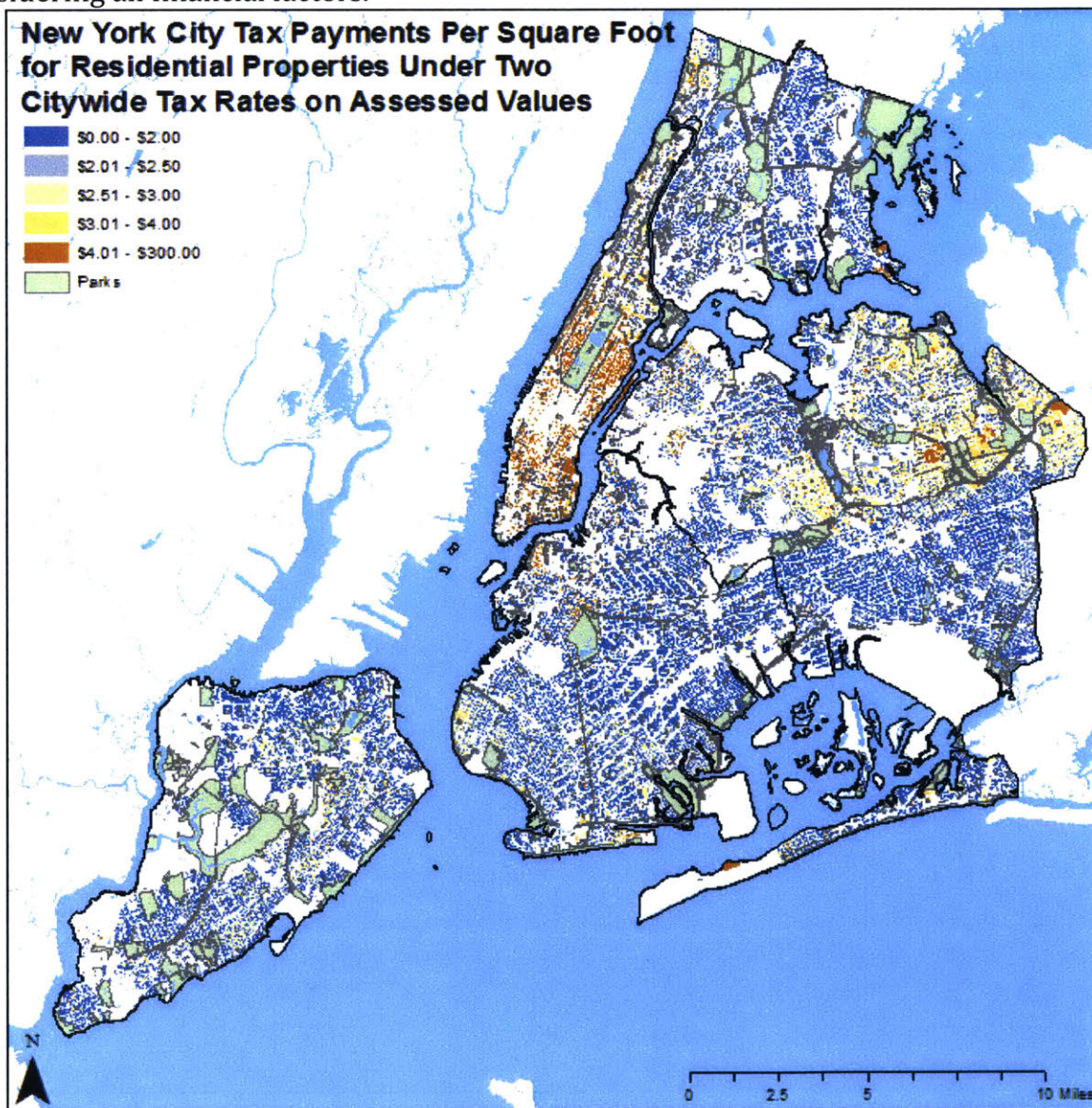


Figure 27. Residential Parcel Map of NYC Properties Showing Estimated Property Tax Values Under a Two-Tax Rate System on Assessed Values

While some portions of the City would still have higher tax rates under this proposal, Figure 28 shows that in fact many parcels would see a decrease in their tax payments. Unfortunately, the results are a bit more mixed when zooming in specifically on residential properties. For instance, some areas in lower-income (but rapidly gentrifying) areas of Brooklyn would see an increase in taxes, along with some portions of the Bronx and northern Manhattan. Many of these are Class 2 properties which started off with disproportionately high assessed values, and which are now seeing an increase in payments with a change in Citywide tax rates. Accordingly, while this proposal might be achievable given the widespread breaks projected for the majority of households, it ultimately is unlikely to rectify the problem of these deep disparities between Class 1 and Class 2 effective tax rates. Their nominal tax rates may now be the same, but as long as assessed value differences are at play, they will never actually be on a level playing field.

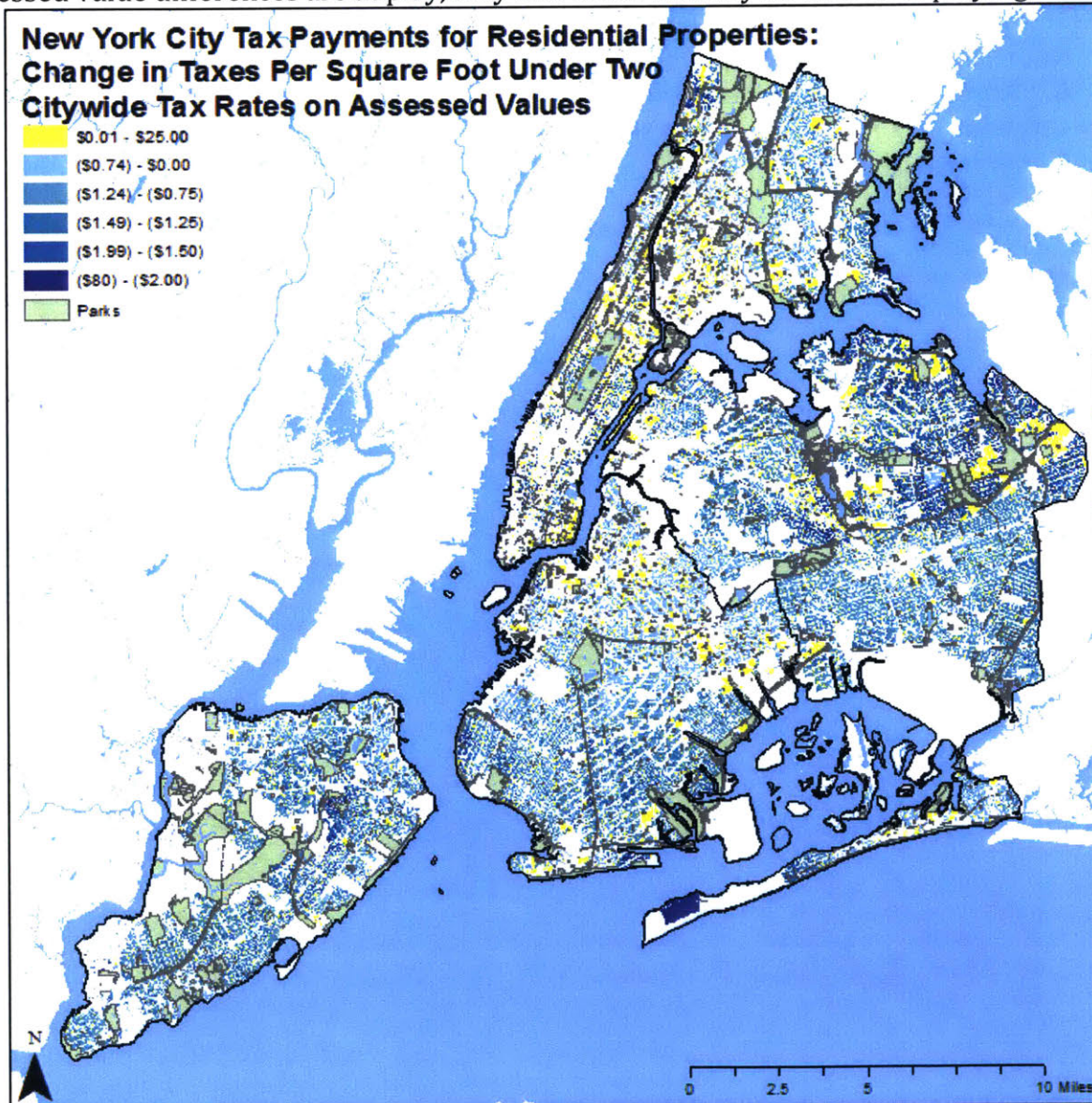


Figure 28. Residential Parcel Map of NYC Properties Showing the Change in Property Tax Values Under a Two-Tax Rate System on Assessed Values

Given that fact, the final scenario examines what would happen if Classes 1 and 2 were grouped and taxed at the same rate (albeit a different one from Classes 3 and 4) based on estimated full market values, rather than billable assessed values. Figure 29 below shows what would theoretically happen under these conditions. As expected, many Class 1 properties would be taxed considerably more heavily than they are under the current system. The overassessment noted by some scholars in the outer boroughs is heavily represented in this symbolization, as now only parts of the Bronx, northern Manhattan, and small patches of Brooklyn and Queens have tax rates per square foot in the lowest bracket. Accordingly, this proposal seems unlikely to be politically popular, however recall that many Class 1 properties in the outer boroughs are already being taxed at this or similar rates now. Therefore, it is difficult to judge simply based on this map whether it might be within reach to implement this policy option.

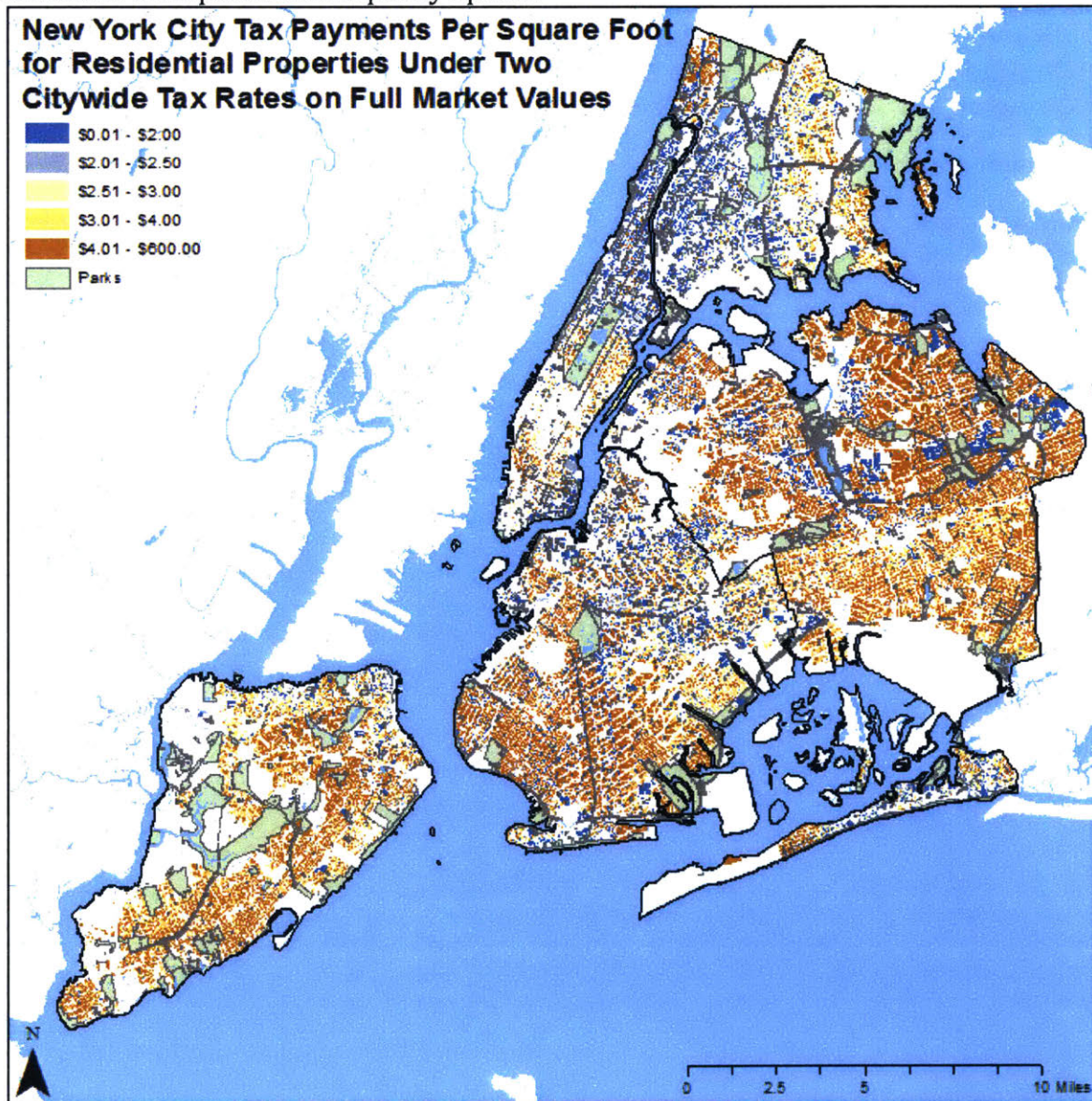


Figure 29. Residential Parcel Map of NYC Properties Showing Estimated Property Tax Values Under a Two-Tax Rate System on Full Market Values

Finally, in the last piece of this spatial investigation, Figure 30 suggests that while all of the proposals had pros and cons, a two-tax rate system based on full market values might in fact be the best option for many of the City's renters. It is not ideal from a political standpoint as it requires tax increases on many Class 1 owners, but it would provide some relief to millions of renter households. The increases on those properties symbolized below in varying shades of yellow and orange would be less severe on an overall basis than under the other proposals, and the most significant increases would accrue primarily to particularly wealthy households living in northeastern Queens. Perhaps more importantly though, it might spur rental housing development over homeownership properties in a City that is direly in need of additional units. While the City would have to take concerted steps to encourage this new housing to be offered at affordable rates, it is better than the status quo in which luxury homeownership housing has vastly outpaced all other development.

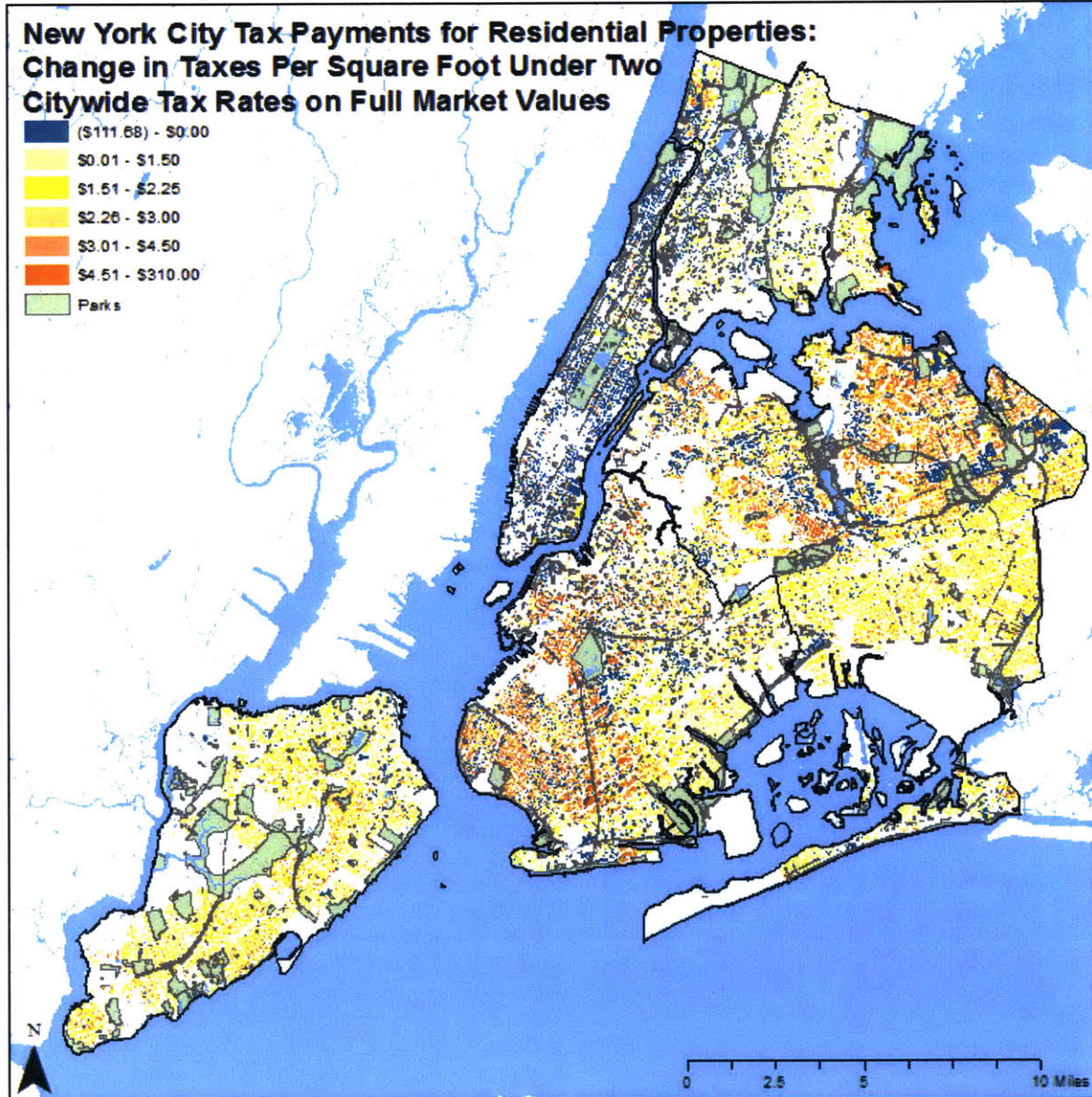


Figure 30. Residential Parcel Map of NYC Properties Showing the Change in Property Tax Values Under a Two-Tax Rate System on Full Market Values

Conclusion

In sum, there unfortunately appears to be no ‘silver bullet’ when it comes to property tax reform in New York City. Although at face-value it is easy to call for decreased taxes on renters, the level of skew that exists currently, combined with the practice of treating all five boroughs as a monolith makes it difficult to identify practices that could improve the plight of the 70% of the City’s residents who currently rent. The next chapter offers some additional avenues for reform, as well as a sociopolitical analysis of how it might be possible to one day pass fundamental property tax reform policies. For better or worse, any effective overhaul must be comprehensive; progress on this issue is unlikely to be achieved through incremental change. As the Deputy Director of the New York City Independent Budget Office noted in his testimony to the New York State Assembly Committee on Real Property Taxation:

“Over the years since the current system was established in 1981, there have been a series of piecemeal changes to address specific problems with the property tax system. In many cases, these band aids, however well intentioned, have created or exacerbated other problems in the system. The best example is probably the coop-condo abatement, which aimed to bring coop and condo tax burdens more in line with the burdens on homeowners. But because the abatement did not change the underlying assessments, the effect was to widen disparities within the coop and condo class. This suggests that fixing a property tax system that virtually all property owners think does not work for them requires a comprehensive overhaul rather than piecemeal tinkering, with all elements of the system on the table.” (5)^{lxxx}.

V. Other Policy Options, Implementation Plan, & Conclusion

While attempts at property tax reform have been made on the policy front, the inequities in taxation across the City today stand as evidence of their shortcomings. Furthermore, the results of Chapter 4 illustrate that many of the most common reform proposals have significant drawbacks and qualify either as financially equitable or politically implementable, but seldom both. Unfortunately, the intractability of reform is a byproduct of the current system; with homeowners starting off in such a privileged position, any change that tips the scales is bound to generate resistance. This presents a critical dilemma in trying to propose effective reform strategies, but it is still an important goal given the City's current affordability challenges.

The preceding chapters have demonstrated that the property tax system is working well for only a small minority of New Yorkers. The lawsuits filed against the City lend credence to researchers' claims that its outcomes are discriminatory. The underlying property tax structure was designed for a New York City that existed nearly four decades ago, and no large-scale changes have been made in the interim. Moreover, the system is now so complex and unwieldy that the City cannot even manage it. A ProPublica investigation found that more than 50,000 units in buildings receiving 421-a and J51 tax breaks had no record of registration for rent stabilization. In other words, 50,000 households that should have had some relative degree of security in their tenancy have instead been subjected to sudden and substantial rent increases, and even evictions, while building owners took advantage of the City's poor oversight of their own system^{lxxxix}.

Though the literature offers some options for shifting the distribution of the tax burden, they are not nearly comprehensive. Accordingly, the first portion of this chapter will be dedicated to visualizing the outcomes of several additional proposals. In formulating these alternatives, all of the preceding information was considered, including the fact that New York City is a large and diverse place, with many different building types, and more importantly, many different real estate sub-markets. Residential buildings alone range from one-story, ranch-style houses in the outer boroughs, to 432 Park Avenue, the tallest residential building in the world at a height of 89 floors (1,400 feet).

Similarly, by some estimates, New York City has literally hundreds of neighborhoods, all of which have unique features and demographics making it difficult to find a one-size-fits-all solution. Even the median household income of different block groups varies by more than \$100,000. Should households making six-figures per year be taxed at the same rate as households making \$20,000 per year? Rationally, there are arguments on both sides of the equation. While it may be most equitable at face value for everyone to pay the same rate, the proportion of household income dedicated to these costs will inevitably vary with such a wide range. All of these issues should be considered when designing a new system to replace the current property tax structure.

Disparity of Tax Rates between Boroughs

In the first paragraph of a brochure produced by the New York State Department of Taxation and Finance entitled 'How the Property Tax Works', it states: "Remember that the real property tax is an ad valorem tax, or a tax based on the value of property. Two owners of real property of equal value in the same municipality should pay the same amount in property taxes. Also, the owner of more valuable property should pay more in taxes than the owner of less valuable property" (1)^{lxxxii}. Unfortunately, examining the effective tax

rates in the five boroughs by dividing total property tax payments by the sum of estimated market values yields Figure 31 below:

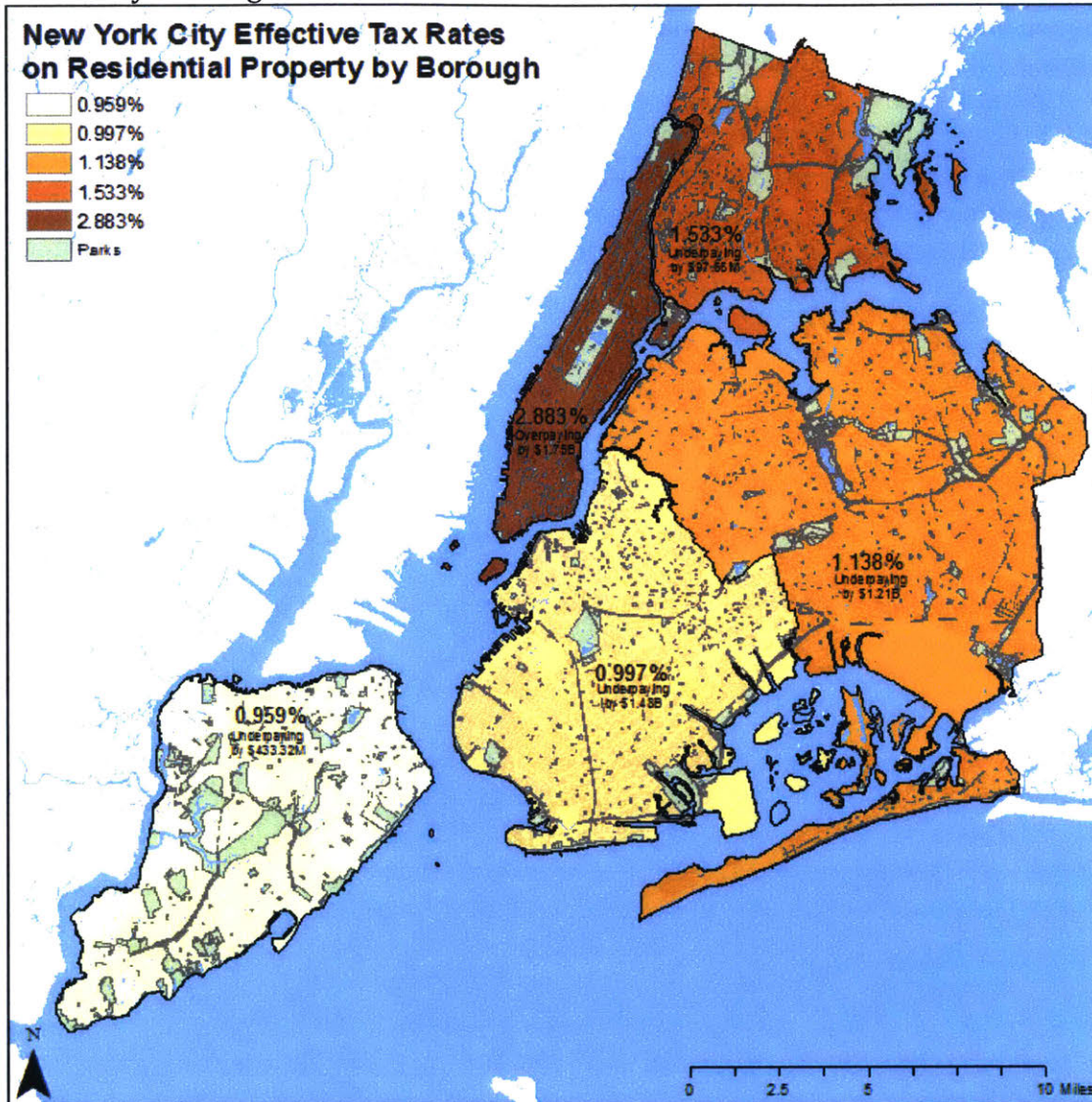


Figure 31. Borough Map of New York City Depicting the Varying Tax Rates on Residential Property & Extent of Over & Underpayments

The text version of what is shown above is that residential real estate in Manhattan comprises 15% of total market value across the City, and 24% of all residential value. Conversely, their tax bills comprise 25% of total tax revenue, and 46% of residential tax revenue. Staten Island, on the other hand, with the lowest borough effective tax rate, makes up 5.22% of the City's overall market value but pays just 2.85% of the property tax. Similarly, housing there comprises 8.42% of the total residential market, but just 5.27% of the residential tax levy. Manhattan contributes more than \$1.75 billion above what it would be expected to if all properties were treated equally. The corresponding magnitudes of underpayment by the other four boroughs are as follows: Brooklyn, \$1.48 billion; Bronx, \$97.66 million; Queens, \$1.21 billion; and Staten Island, \$433.32 million.

If all properties were in fact taxed at the same rate, the result would be the single tax rate maps displayed in the previous chapter. Instead, each borough has a different effective

tax rate on residential property, all things considered. Accordingly, the City should explore ways to equalize these inequities through policy changes. A single tax rate ignores much of the nuance of the market and fails to capture value in an efficient way.

Graduated Citywide Tax Rate

A potential alternative the City could consider is implementing a graduated tax rate. Figure 32 shows a visualization of one way such a proposal could play out:

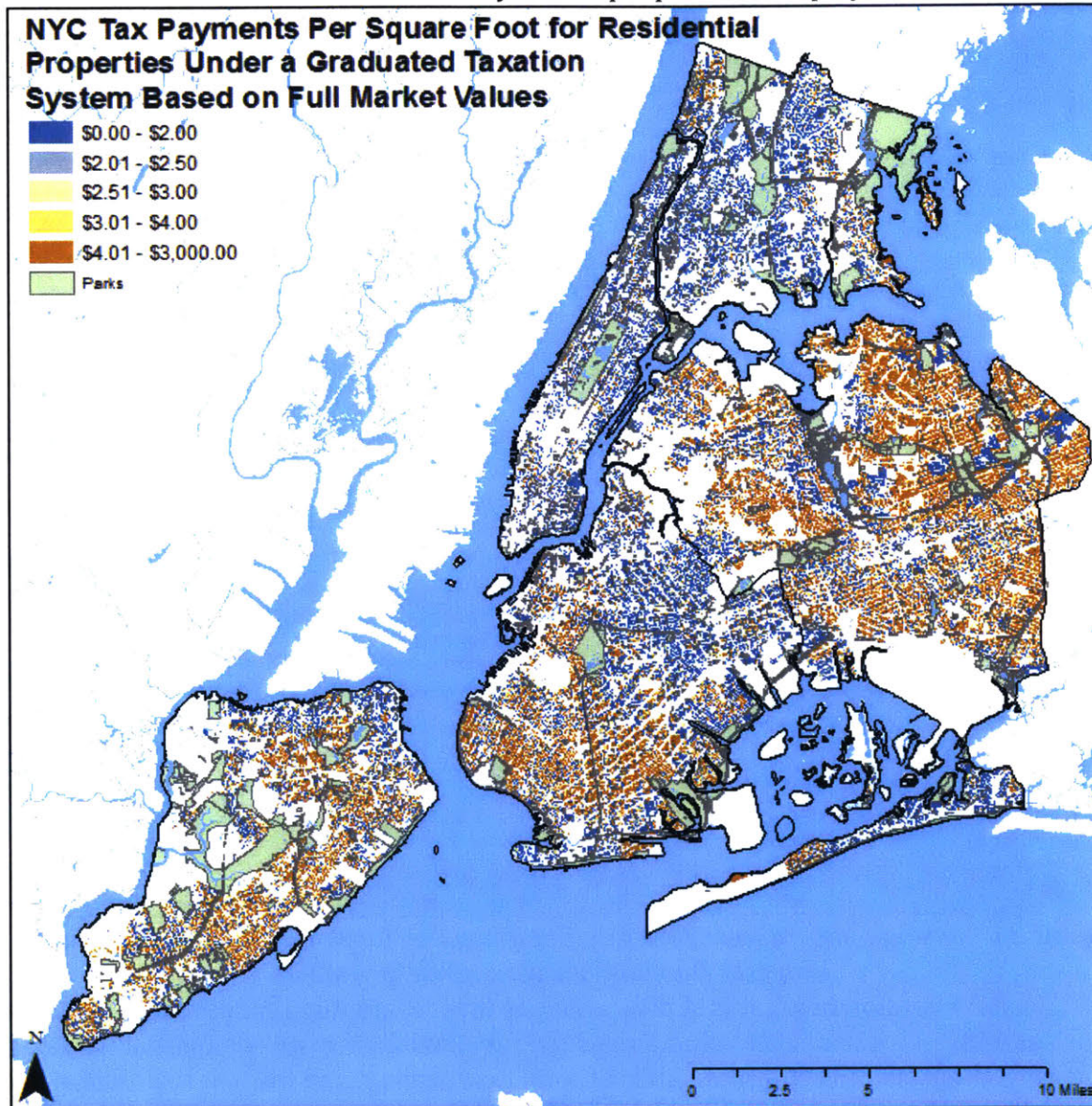


Figure 32. Residential Parcel Map of New York City Property Tax Values Under a Graduated Tax System in which the Tax Rate Increases Marginally as Estimated Market Value Increases Under this system, properties with higher market values per square foot would be taxed at incrementally higher rates than properties with lower valuations. In this model, the tax rate starts off at .00001%, and grows progressively by 0.00005817% as market value increases until the total matches the current tax revenue. This tactic is employed rather than setting strict cutoffs at which the rate jumps in order to avoid artificial price suppression just below each gradation increase. A structure such as this, designed to counter the

regressivity of the existing system, would allow the City to effectively tax wealthy residents without simultaneously increasing the rent burden on low- and middle-income households.

On the downside, this proposal would certainly receive a great deal of pushback in addition to being difficult to design and implement. It is unlikely the City could effectively administer and maintain the accuracy of a system with a gradation of different rates, given their record of poor oversight. Figure 32 does come within range of mirroring the map of median household incomes however, and certainly relieves the strain on the many Class 2 properties in northern Manhattan, the southwestern Bronx, and central Brooklyn.

Millionaire's Tax

A more streamlined option in the same vein would be to institute a 'millionaire's tax', levying a higher rate on properties over a certain value. The version of this policy modeled in Figure 33 sets the trigger price per unit at \$1 million, impacting 3% of parcels:

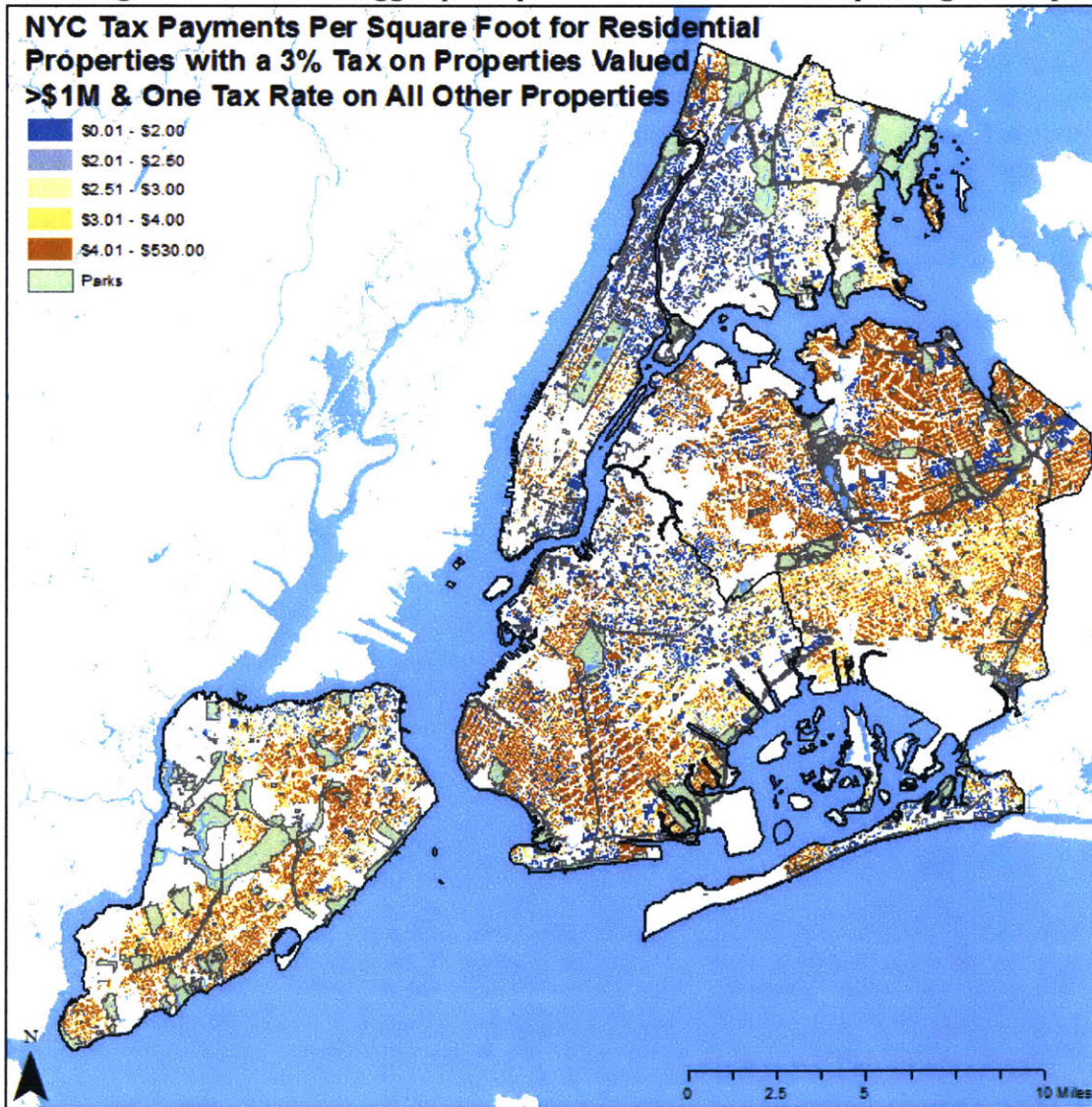


Figure 33. Parcel Map of New York City Property Tax Values Under a System in which Units Over \$1 Million are Taxed at 3% & all other Residential Properties at a Lower Citywide Rate Under this proposal, properties with estimated market values at or above \$1 million per unit would be taxed at 3%, while all other residential properties would be taxed at a single

rate. This shift would effectively tax high value properties across the City at the rate applied to all residential properties in Manhattan (see the 2.88% boroughwide residential tax rate in Figure 31). This would allow for a reduction in the citywide residential tax rate described in Chapter 4 for all other properties from 1.5322% to 1.3783%.

Owners of units valued at \$1 million or more would pay a total of \$2,043,233,686.47 under this proposal, or 20.83% of the total tax burden. This stands in stark contrast to the current system under which these units contribute just \$456,459,660, or 4.65% of the total tax burden. These undervalued properties make up more than 10% of the City's total market value; it is inefficient for them to be paying less than 5% of the total property taxes. By borough, Manhattan would shoulder 50.37% of this new total, Brooklyn 32.42%, the Bronx 1.73%, Queens 12.38%, and Staten Island 3.09%. Although Figure 33 looks similar to Figure 25, this proposal would tax less valuable parcels at a lower rate while enabling the City to capture more value from those wealthy households able to afford high-priced units.

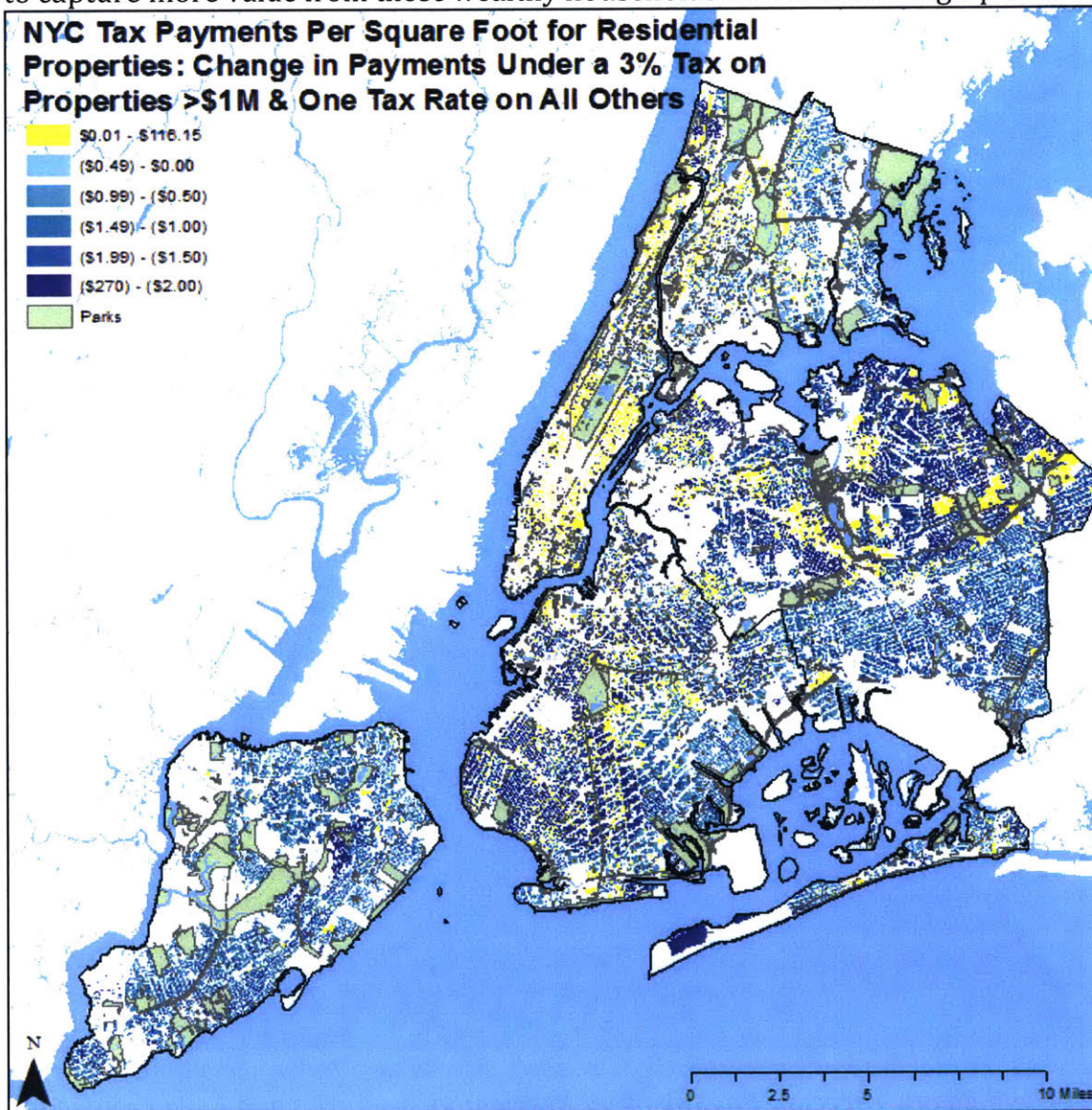


Figure 34. Parcel Map of Change in NYC Property Tax Values Under a System in which Units Over \$1 Million are Taxed at 3% & all other Residential Properties at a Lower Citywide Rate

Figure 34 depicts the projected change in property tax payments across the City as compared to current tax bills. Unsurprisingly, this reform option results in widespread tax reductions across the City. The many high-priced units in Manhattan will see increases, however throughout all of the other boroughs, most properties will receive a decrease from their current tax payments. Aside from some yellow patches in northern Manhattan and in the Bronx, there is little to protest about this outcome. While renters in Manhattan will not reap much benefit from this policy, tax reductions across the rest of the City generally bode well for residents, especially since the wealthiest citizens who are more likely to be able to afford the increases are the ones slated to pick up the slack. Given that Class 1 property owners in Queens, Brooklyn, Staten Island, and the Bronx will see some of the deepest cuts under this scenario, it might actually be possible for such a proposal to gain traction in the political arena.

Costs & Benefits of Other Proposals

While several of the proposals described in Chapter 4 and above show some degree of promise, the key takeaway from this analysis seems to be that while reform is direly needed, there is no single, streamlined way forward. None of the options illustrated so far appear to successfully mitigate the inequities in New York City without creating significant problems for one group or another. The diversity of incomes and household types across the five boroughs makes it effectively impossible to cater to all needs at once. Accordingly, it may take a combination of solutions to remedy the problem and ensure that all residents are paying their fair share for the services used by everyone.

Some other potential policy options that could be combined with additional interventions and which might be of interest for future research include:

- Assigning tax rates based on median household income at some level of geographic specificity (e.g. block group, neighborhood tabulation area, etc.)
 - o Benefits:
 - Ensures that to some extent taxes are pro-rated for low- versus high-earning households
 - Protects low-income households in rapidly appreciating areas from sudden price shocks as median household income often shifts more slowly than property values
 - Might spur investment in underresourced communities
 - o Drawbacks:
 - Messy and difficult to administer
 - Disproportionately impacts low-income households living in high-income communities
 - Could hasten gentrification
- Alternative versions of the 'millionaire's tax' e.g. higher value cutoff, higher/lower tax rate, etc.
 - o Benefits:
 - Progressively taxes the wealthy at a higher rate than lower-income households who may be less able to pay
 - May boost production of lower-priced homes in efforts to avoid the tax
 - Should assist low-income households in rapidly gentrifying areas by transferring more of the tax burden onto richer residents

- Drawbacks:
 - The real estate community will push back heavily and may make it impossible to advance such a policy
 - This will help some neighborhoods/boroughs more than others, so it will be critical to have a strategy in place to effectively spread the funds around
 - The City has already proven that oversight of tax programs is not its strength so this may end up being poorly administered
- Real estate tax on foreign buyers (Vancouver recently instituted a tax of 15%)
 - Benefits:
 - Decreases the interest from foreign buyers which some estimates claim make up 40% of new home purchasers in New York City, thereby slowing demand for luxury properties that drive up prices for all households
 - Reduces the frequency of buildings being marketed first to outside interests, and only subsequently to New Yorkers, which shrinks the housing stock available to current residents
 - Decreases the number of units sitting empty for substantial portions of the year
 - Drawbacks:
 - Here again, the real estate industry will push back and potentially make this untenable
 - NYC is expected to have a surplus of nearly 10,000 super luxury units by the end of 2017; dissuading foreign buyers may mean these units will sit unpurchased for considerably longer than they are already expected to

The second two options have been implemented elsewhere with some success, so there is precedent if the political will can be mustered. Additionally, the undervaluation of condos and co-ops needs to be rectified as soon as possible. With the aforementioned glut of luxury housing set to be sold over the next five years, the City cannot afford to surrender the opportunity to collect taxes on these units. This issue is highlighted repeatedly in the literature, and is a major cause of the skew in the current system.

Sociopolitical Analysis

It has been frequently noted over the course of this research that it will require a great deal of effort and coordination to advance a property tax reform agenda for New York City. This is part of the reason that no administration has succeeded in its attempts to date. Towards this end, the final portion of this chapter will examine which organizations and entities could be involved in a movement to drive forward a more equitable and efficient tax system.

Seemingly, the only way to move the needle on property tax reform is to begin at the local level and work upwards. As long as renters remain unaware of how much the property tax system actually impacts them, there will be no pressure for anyone in power to do anything to ameliorate the situation. Accordingly, a potential first step would be to begin reaching out to neighborhood organizations, tenants' rights groups, housing advocates, and other similar entities with information along the lines of that contained in this analysis. Demonstrating the magnitude of the issue to people who are already

entrenched in the housing space will help to begin the process of mobilizing action. Compounding education efforts via a train-the-trainer model will ensure that the necessity of reform echoes across all five boroughs and begins to be disseminated to residents of Class 2 properties who deserve to know more about what they are paying and why.

As this news spreads through both formal and informal channels, it will be necessary to begin holding more structured events around developing an action plan. This plan should include continued outreach and education, including how to check whether a unit should be rent stabilized as a result of exemptions/abatements. Citizens should begin reaching out to the City Council member responsible for their district, in order to make it known that this is a priority for constituents. Additionally, community groups should be prepared with resources to empower renters to discuss the matter with their landlords. Although these conversations are unlikely to decrease the tenants' rent, a citywide movement of informed and vocal renters is critical on a number of fronts, not just for advancing a property tax reform agenda.

Moreover, increased data collection, processing, dissemination, and maintenance are essential for this effort to succeed. With minimal transparency around the property tax system as a whole, and even less clarity on how much of the property tax is being passed through to renters by landlords, it is especially difficult to mobilize a concerted response. Accordingly, a grassroots effort to begin compiling this data should commence, with the ultimate goal of pressuring the City's Department of Finance to begin collecting this data as part of the assessment and billing process. Organizers would be remiss in excluding data collection and transparency from their platform, which should otherwise be based around building the necessary coalitions and people power to identify an actionable path forward, and then immediately working to implement it.

Theoretically, the current political establishment should be in a strong position to advance an equity agenda around housing. All but three of the City Council seats are held by Democrats. The Mayor is a Democrat, as is the Governor. Both of these gentlemen have identified housing affordability as one of the key priorities of their respective administrations. Although Mayor de Blasio in particular has faced opposition over some of his progressive policies, and the City and State governments have clashed on various fronts, improving this system would be mutually beneficial given property taxes' impact on the housing market.

There are a number of City agencies that should be involved in this effort before moving to advocate at the State level. While the Department of Finance will obviously be a central player, other potential decision makers/brokers are as follows:

- Department of City Planning
- Community Affairs Unit
- Community Boards
- Comptroller
- Mayor's Office of Data Analytics
- Borough District Attorney Offices
- Department of Homeless Services
- New York City Housing Authority
- Department of Housing Preservation and Development
- NYC Independent Budget Office
- Mayor's Office of Intergovernmental Affairs

- Law Department
- Office of Management and Budget
- Mayor's Office
- Mayor's Office of Operations
- Public Advocate
- Rent Guidelines Board
- New York City Tax Commission

These agencies all deal with housing, property development, taxes, advocacy, and/or legislation, and will likely need to be on-board in some way with whatever solution is proposed. Additionally, community groups and tenants' rights organizations such as the Metropolitan Council on Housing, Make the Road New York, Tenants & Neighbors, New York Communities for Change, and a slew of borough-specific entities should be included in the conversation in order to ensure sufficient representation of residents' interests.

The next step in the process will be to convince leaders at the State level.

Unfortunately, part of the challenge of reform stems from the fact that the foundation of the property tax system, that of the four-class structure, is actually enforced by the State of New York, rather than New York City. While it is certainly possible to work around this fact as the remainder of the system is controlled at the municipal level, in order for reform to have longevity across administrations with varying political views it is most prudent to transform the system entirely. Some branches of the State government that could/should be involved in the effort include:

- Department of Taxation and Finance
- Division of Tax Appeals and Tax Appeals Tribunal
- Empire State Development
- Homes and Community Renewal
- Housing Finance Agency/State of NY Mortgage Agency (SONYMA)
- Office of Attorney General
- Office of the Governor
- Office of the Inspector General

As part of this work, the data used for the preceding chapters of maps was also translated into a dynamic digital interface designed to allow people to look up how much of their rent is likely going towards property taxes. New York City renters can now visit the webpage, type in their address, and view a map popup that lists the total property tax bill for the building in 2015, as well as the tax figure on a per unit basis, value of abatements and exemptions, whether the building receives 421-a benefits and therefore should be rent-regulated, etc. This allows renters to see how much money they are likely paying per year towards taxes, as well as whether or not their building should be rent-stabilized (in case it should be and is not). It could ideally also help people searching for apartments to be more informed about where their rent dollars are actually going. The map was made using Leaflet, and customized using JavaScript. It can be employed as an advocacy tool as part of the process described above, or as a standalone utility. [The tool can be viewed here.](#)

Conclusion

New York City's property tax structure was designed for a different time and place than the city it now presides over. New York is well on its way to becoming a playground solely for the rich, and the inefficiency and regressivity of the current property tax structure is only serving to hasten this outcome. While attempts have been made to update

and revise the system, there are so many layers of complexity and stakeholders with conflicting interests that no one has yet succeeded. Unfortunately, their efforts have resulted in adjustments that have increased inequality, not remedied it. With multiple levels of City and State government prioritizing housing affordability though, and with land becoming increasingly constrained across the five boroughs, it is time for the establishment to try again.

The current system exhibits skew from the outset; the map of estimated market values should raise questions among those with even the most rudimentary knowledge of New York City. These inaccuracies then permeate the remainder of the calculations, as additional layers of inequity, from assessment ratios to tax rates, are engineered on top. Combine this with a complex and poorly monitored catalog of exemptions and abatements, and it is difficult to see a way out of this morass.

Despite the unpromising outlook, academics and City agencies alike have presented ideas for reform over the years aimed at restoring owners and renters to a more equal status. Their suggestions include: 1. Revising the valuation system for condominiums and cooperatives to better align with real market values; 2. Taxing all property across the City at a single, uniform rate; and 3. Taxing all residential property across the City at the same rate, and all other property at a different rate. Of the options explored in this analysis, one tax rate on all property based on assessed values, two tax rates on market values, and a 'millionaire's tax' on top of a single Citywide tax rate seem to hold the most potential, considering both social and economic outcomes as well as political feasibility. Unfortunately though, the results of this research also show that even these efforts might not yield the desired outcomes as expensive but undervalued luxury buildings continue to underpay while low-income homeowners struggle to keep up with appreciating values.

Ultimately, it may not be possible to design a one-size-fits-all solution for a city as varied as New York. Residential buildings range from one floor to nearly 100 floors, units range from studios to mansions, and the spectrum of incomes even at an aggregate level reaches six figures. Is it realistically possible to design a functional system that caters to and fairly taxes all of these different homes and households? Regardless of the answer to this question, the City has a responsibility to its citizens to try. Strong coalitions from grassroots to grasstops must come together to devise a financially efficient and politically viable way forward. Property tax reform is a critical step towards ensuring that people of all incomes can afford a place to sleep in the City that Never Sleeps.

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