2022 Income and Expense Study

March 31, 2022

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New York City Rent Guidelines Board

2022 Income and Expense Study

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04	RPIE Study	☑ This year's study reflects the significant impact of the first year of the COVID-19 pandemic on the NYC economy.
13	Longitudinal Study	☑ From 2019 to 2020, Net Operating Income (revenue remaining after operating costs are paid) fell 7.8% for buildings containing rent stabilized units, the fourth decrease in the last 30 years.
16	Summary	☑ Rental income decreased an average of 3.8% between 2019 and 2020.
16	Methodology	☑ Total income declined an average of 4.6% between 2019 and 2020.
20	Appendices	☑ Operating costs fell an average of 2.8% between 2019 and 2020.

Introduction

As part of the process of establishing rent adjustments for stabilized apartments, as required by the Rent Stabilization Law, the NYC Rent Guidelines Board (RGB) since 1969 has analyzed the cost of operating and maintaining rental housing in New York City. Until 1990, the Board measured changes in prices and costs solely using the Price Index of Operating Costs (PIOC), a survey of prices and costs for various goods and services required to operate and maintain rent stabilized apartment buildings, which include buildings that contain at least one rent stabilized unit.

Beginning in 1990, the RGB began using a new data source that greatly expanded the information base used in the rent adjustment-setting process: Real Property Income and Expense (RPIE) statements from buildings containing stabilized units collected by the NYC Department of Finance. RPIE data encompasses both revenue and expenses, allowing the Board to accurately gauge the overall economic condition of New York City's rent stabilized housing stock. By using consecutive RPIE filings from an identical set of buildings, a longitudinal comparison can also be made that illustrates changes in conditions over a two-year period.

This report examines the conditions that existed in New York's rent stabilized housing market in 2020, the year for which the most recent data set is available, and the extent to which these conditions changed from 2019. This Income & Expense Study reflects the extraordinary impact of the first year of the COVID-19 pandemic on NYC's housing market.

Local Law 63

The income and expense (I&E) data for stabilized properties originate from Local Law 63, enacted in 1986. This statute requires owners of apartment buildings to file RPIE statements with the NYC Department of Finance annually. While certain types of properties are exempt from filing RPIE forms (cooperatives, condominiums, most residential-only buildings with fewer than 11 units or with an assessed value under \$40,000), the mandate produces detailed financial information

on thousands of buildings containing stabilized units. To ensure only buildings that contain rent stabilized units are analyzed (see Methodology section for further details), the NYC Department of Finance releases data to the RGB only after matching I&E data with building registration data from NYS Homes and Community Renewal (HCR). The data used in this year's RGB Income and Expense (I&E) Study includes 14,828 properties containing 684,597 units.

RPIE Study

Rents and Income

RPIE rent figures include revenue collected for apartments (both rent regulated and unregulated), owner-occupied or related space and government subsidies. In 2020, rent stabilized property owners collected monthly rent averaging \$1,422 per unit. As in previous years, units in pre-war buildings rented for less on average (\$1,310 per month) than those in post-war buildings (\$1,676 per month).¹

At the borough level, the average monthly rents in buildings containing stabilized units were \$1,870 in Manhattan (\$2,363 in Core Manhattan and \$1,369 in Upper Manhattan); \$1,372 in Queens; \$1,367 in Brooklyn; \$1,115 in Staten Island; and \$1,053 in the Bronx. Average monthly rent per unit in the City, excluding Core Manhattan², was \$1,288.

The median monthly rent Citywide was \$1,280 in 2020. At the borough level, median rent was \$1,625 in Manhattan (\$1,835 in Core Manhattan and \$1,270 in Upper Manhattan); \$1,317 in Queens; \$1,221 in Brooklyn; \$1,092 in Staten Island; and \$1,043 in the Bronx. Median monthly rent per unit in the City, excluding Core Manhattan, was \$1,184.

Many building owners supplement income from their apartment rents by selling services as well as by renting commercial space. Gross income encompasses all revenue from rent, including apartment rent; commercial rent (e.g., retail, cell towers, billboards); sales of services, such as laundry, parking, and vending; and all other operating income. Current RPIE filings show an average monthly gross income of \$1,580 per unit in 2020,

with pre-war buildings earning \$1,458 per unit and post-war properties earning \$1,857 per unit. Gross income was highest in Manhattan, at \$2,172 per unit per month (\$2,636 in Core Manhattan, and \$1,579 in Upper Manhattan). In the remainder of the City, Brooklyn's gross income was \$1,458; followed by Queens, at \$1,452; Staten Island, at \$1,222; and the Bronx, at \$1,177. Monthly income per unit in the City, excluding Core Manhattan, was \$1,388. Income from commercial space and services accounted for a 10.0% share of the total income earned by building owners in 2020, down eighttenths of a percentage point from the previous year. By borough, income earned from services and commercial rents as a percentage of total building income was 13.9% in Manhattan (14.2% in Core Manhattan and 13.3% in Upper Manhattan); 10.5% in the Bronx; 8.8% in Staten Island; 6.3% in Brooklyn; and 5.5% in Queens. In the City excluding Core Manhattan, the proportion was 7.2%. The graph

on this page shows the average rent and income collected in 2020 by borough, and for the City.

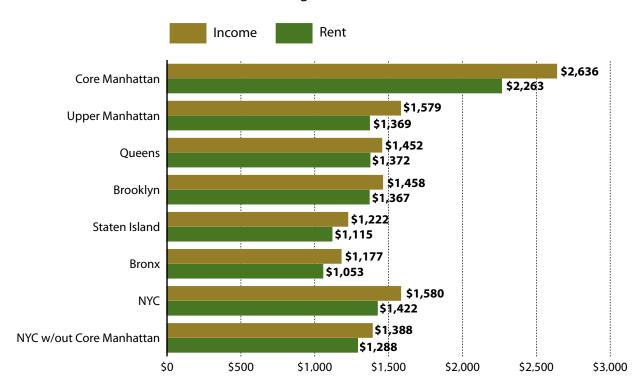
Median income for owners in 2020 was \$1,389. At the borough level, Manhattan had the highest median income, at \$1,846 (\$2,090 in Core Manhattan and \$1,409 in Upper Manhattan); followed by Queens, at \$1,363; Brooklyn, at \$1,289; Staten Island, at \$1,186; and the Bronx, at \$1,147. Median monthly income per unit in the City, excluding Core Manhattan, was \$1,271. (For rent and income averages and medians by borough, building age, and size, see details in Appendices 3 and 4.)

Comparing Rent Measurements

Another data source, NYS Homes and Community Renewal (HCR) annual registration data, provides important comparative rent data to the collected rents stated in RPIE filings. A comparison of collected

Average Monthly Collected Income/Rent per Dwelling Unit by Borough





Note: Core Manhattan refers to the area south of W 110th and E 96th Streets. Upper Manhattan refers to the remainder of the borough. Source: NYC Department of Finance, 2020 RPIE Data

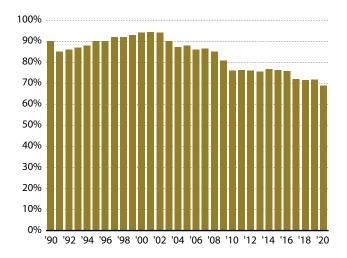
RPIE rents to HCR rents is an indicator that reflects conditions such as preferential rents, nonpayment and vacancies.

Rents included in RPIE filings are different than HCR figures primarily because of differences in how average rents are computed. RPIE data reflects actual rent collections, while HCR data consists of legal rents registered annually with the agency. Since HCR rent data does not reflect preferential rents, nor include vacancy and collection losses, these have always been higher than RPIE rent collection data. In addition, RPIE information includes unregulated apartments in buildings containing rent stabilized units. Further, the RPIE information reflects rents collected over a 12-month period while HCR data reflect rents registered, at a particular point in time, on April 1 of each year.

From 2019 to 2020, the gap between annual RPIE and HCR average rents was 31.1%, as indicated by the average RPIE rent of \$1,422 and average HCR legal stabilized rent of \$2,065. This is a 2.9 percentage point increase from the 28.2% gap the previous year, a growth in the gap that follows

Average Monthly Citywide Collected Rents as a Share of Average Monthly HCR Legal Registered Rents, 1990-2020

> Percentage of Legal Rent Collected Decreased in 2020



Source: HCR Annual Rent Registrations; NYC Department of Finance, 1990-2020 RPIE Data the general trend since 2002 of a growing gap in most years. (See graph on this page for a historical comparison of RPIE and HCR rent differences since 1990, when data first became available.)

At the borough level, the gap between collected and legal rent varies significantly. In 2020, Staten Island property owners collected an average rent (\$1,115) that was 36.5% below HCR's average legal rent for the borough (\$1,755), while owners in the other boroughs collected average rents that were 34.3% lower in Manhattan; 29.3% lower in Queens; 28.1% lower in Brooklyn; and 26.7% lower in the Bronx. At least part of this differential is due to preferential rents, usually offered when the legal stabilized rent exceeds the market rate for the area.³ The gap this year was also exacerbated by the pronounced impact of declining market rents due to the COVID-19 pandemic.⁴

Another benchmark that can help place RPIE rent data in context is the RGB Rent Index, which measures the overall effect of the Board's annual rent increases on contract rents each year. As the table on the next page shows, average RPIE rent growth, reflecting the decline in market rents, fell 3.8%, while the RGB rent index increased 1.5% between 2019 and 2020 (adjusted to a calendar year).⁵

It is important to note that prior to passage of the *Housing Stability & Tenant Protection Act of 2019*, effective June 2019, there were several ways in which rents could be raised beyond the RGB's guidelines, including the deregulation of apartment units; raising of preferential rents; and vacancy allowances, impacting both RPIE and HCR rent growth.

An extended view of the three indices illustrates that overall, HCR legal rents have grown faster than both collected rents and RGB rent guidelines from 1990 to 2020. During this period, HCR adjusted legal rents increased 252.7%,⁶ RPIE collected rents increased 209.4%, and the RGB Rent Index increased 191.9% (percentages not adjusted for inflation).⁷

Operating Costs

Rent stabilized apartment buildings regularly incur several types of expenses. RPIE filings categorize

Rent Comparisons, 1990-2020

2019-20 RPIE Collected Rent Decreased While Both HCR Legal Rents and the RGB Rent Index Increased

Rent Rent Rent Index (Adjusted)§ (Adjusted)Ø 1990-91 3.4% 4.1% 4.1% 1991-92 3.5% 3.0% 3.7%		RPIE	HCR	RGB
(Adjusted)§ (Adjusted)Ø 1990-91 3.4% 4.1% 4.1%		Rent	Rent	Rent
1990-91 3.4% 4.1% 4.1%		Growth	Growth	Index
			(Adjusted)§	(Adjusted)Ø
1991-92 3.5% 3.0% 3.7%	1990-91	3.4%	4.1%	4.1%
	1991-92	2 3.5%	3.0%	3.7%
1992-93 3.8% 3.0% 3.1%	1992-93	3.8%	3.0%	3.1%
1993-94 4.5% 2.4% 2.9%	1993-94	4.5%	2.4%	2.9%
1994-95 4.3% 3.1% 3.1%	1994-95	4.3%	3.1%	3.1%
1995-96 4.1% 4.1% 4.5%	1995-96	6 4.1%	4.1%	4.5%
1996-97 5.4% 4.6% 5.2%	1996-97	7 5.4%	4.6%	5.2%
1997-98 5.5% 3.3% 3.7%	1997-98	3 5.5%	3.3%	3.7%
1998-99 5.5% 3.7% 3.8%	1998-99	5.5%	3.7%	3.8%
1999-00 6.2% 4.4% 4.2%	1999-00	6.2%	4.4%	4.2%
2000-01 4.9% 5.3% 5.0%	2000-01	4.9%	5.3%	5.0%
2001-02 4.0% 4.4% 4.5%	2001-02	2 4.0%	4.4%	4.5%
2002-03 3.6% 6.9% 4.1%	2002-03	3.6%	6.9%	4.1%
2003-04‡ - 1.6% 5.5%	2003-04‡	1‡ -	1.6%	5.5%
2004-05 4.6% 5.8% 4.6%	2004-05	4.6%	5.8%	4.6%
2005-06 5.6% 7.2% 4.3%	2005-06	5.6%	7.2%	4.3%
2006-07 6.5% 6.0% 4.2%	2006-07	7 6.5%	6.0%	4.2%
2007-08 5.8% 5.9% 4.7%	2007-08	3 5.8%	5.9%	4.7%
2008-09 1.4% 5.4% 7.5%	2008-09	1.4%	5.4%	7.5%
2009-10 0.7% 5.4% 5.2%	2009-10	0.7%	5.4%	5.2%
2010-11 4.4% 5.7% 3.7%	2010-11	4.4%	5.7%	3.7%
2011-12 5.0% 5.8% 4.4%	2011-12	2 5.0%	5.8%	4.4%
2012-13 4.5% 5.4% 4.1%	2012-13	3 4.5%	5.4%	4.1%
2013-14 4.8% 5.1% 4.1%	2013-14	4.8%	5.1%	4.1%
2014-15 4.4% 4.5% 2.2%	2014-15	4.4%	4.5%	2.2%
2015-16 3.1% 4.0% 1.6%	2015-16	5 3.1%	4.0%	1.6%
2016-17 3.0% 3.9% 1.9%	2016-17	7 3.0%	3.9%	1.9%
2017-18 3.7% 3.7% 2.4%	2017-18	3.7%	3.7%	2.4%
2018-19 3.3% 2.6% 2.5%	2018-19	3.3%	2.6%	2.5%
2019-20 -3.8% 0.7% 1.5%	2019-20	-3.8%	0.7%	1.5%
1990 to	1990 to			
2020*‡ 209.4% 252.7% 191.9%			252.7%	191.9%

[§] See Endnote 5 Ø See Endnote 6

operating and maintenance (O&M) costs into eight major categories: taxes; labor; utilities; fuel; insurance; maintenance; administrative; and miscellaneous costs. Costs do not include debt service. However, in contrast to revenues, expenses do not distinguish between commercial space and apartments, making the calculation of "pure" residential operating and maintenance costs impossible, except in a smaller data set of residential-only buildings. Thus, the operating costs, which are reported on an average per-unit basis, are comparatively high because they include various expenses for commercial space.

The average monthly O&M cost for units in buildings containing stabilized units was \$1,035 in 2020. Costs were lower in units in pre-war structures (\$997), and higher among post-war buildings (\$1,122).

By borough, average costs were lowest in Staten Island (\$810); followed by the Bronx (\$811); Brooklyn (\$895); and Queens (\$934); and highest in Manhattan (\$1,451). Within Manhattan, costs for units located in Core Manhattan averaged \$1,752 a month, while the costs in Upper Manhattan were \$1,066. Excluding Core Manhattan, the average monthly operating costs for stabilized building owners in New York City was \$900. The graph on the next page details average monthly expenses by cost category and building age for 2020. The graph shows that taxes make up the largest expense, averaging 31.3% of all costs among buildings containing stabilized units.

Citywide, 2020 median O&M costs were \$937. By borough, Manhattan had the highest median costs, at \$1,245 (\$1,407 in Core Manhattan and \$976 in Upper Manhattan); followed by Queens at \$886; Brooklyn at \$849; the Bronx at \$793; and Staten Island at \$771. Median monthly expenses in the City, excluding Core Manhattan, were \$853 (Appendices 1-3 break down average costs by borough and building age; Appendix 4 details median costs; and Appendix 6 details distribution of costs.)

In 1992, the NYC Department of Finance and RGB staff tested RPIE expense data for accuracy. Initial examinations found that most "miscellaneous" costs were administrative or maintenance costs.

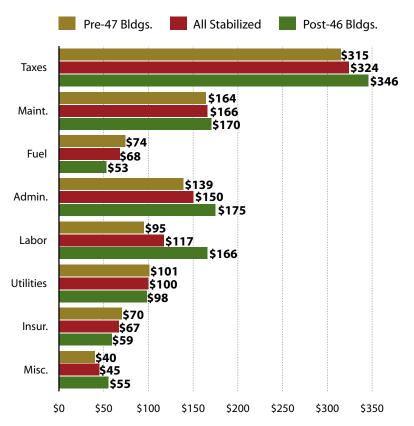
[‡] See Endnote 7

^{*} Not adjusted for inflation

Sources: NYS HCR Annual Rent Registrations; NYC Department of Finance, 1990-2020 RPIE Data

Average Monthly Expense per Dwelling Unit per Month

Taxes Remain Largest Expense in 2020



Source: NYC Department of Finance, 1990-2020 RPIE Data

while 15% were not valid business expenses. Further audits on the revenues and expenses of 46 rent stabilized properties revealed that O&M costs stated in RPIE filings were generally inflated by about 8%. Costs tended to be less accurate in small (11-19 units) properties and more precise for large (100+ units) buildings. However, these results are somewhat inconclusive since several owners of large stabilized properties refused to cooperate with the NYC Department of Finance's assessors. Adjustment of the 2020 RPIE O&M cost (\$1,035) by the results of the 1992 audit results in an average monthly O&M cost of \$951.8

Just as buildings without commercial space typically generate less revenue on a per-unit basis than stabilized properties with commercial space, operating expenses in these buildings tend to be lower on average than in buildings with a mixture of uses. In 2020, unaudited average O&M costs for "residential-only" buildings were \$956 per month, and average audit-adjusted O&M costs for these buildings were \$878 per month. Thus, residential-only buildings have average O&M costs that are 7.7% lower than all buildings.

Distressed Buildings

Buildings that have operating and maintenance costs that exceed gross income are considered, for the purposes of this study, distressed. Among the properties in 2020 that filed RPIEs, 964 buildings, egual to 6.5% of the total number of buildings containing stabilized units, had reported O&M costs that exceeded gross income this year. This was one full percentage point higher than the prior year. Since 1990, when 13.9% of stabilized properties were considered the proportion of distressed. distressed buildings declined to as low as 4.9% in 2016. The proportion

of distressed properties has since risen each the last four years, to the most recent 6.5%, the highest level since 2013. (See graph on the next page). Comparing Core Manhattan to the rest of the City, the proportion of distressed properties in Core Manhattan rose 3.1 percentage points from 2019 to 2020, compared to a 0.1 percentage point increase in the rest of the City.

By borough, 56.6% of distressed buildings are in Manhattan; while the remaining buildings are in Brooklyn (16.6%); the Bronx (15.7%); Queens (10.6%); and Staten Island (0.5%). (See Appendix 7 for a complete breakdown of distressed buildings by borough, building size and building age.)

Proportion of Distressed Properties, 1990-2020

Share of Distressed Properties Increases in 2020



Source: NYC Department of Finance, 1990-2020 RPIE Data

Net Operating Income

Revenues exceed operating costs in nearly all buildings, yielding funds that can be used for mortgage payments, improvements and/or pretax profit. The amount of income remaining after operating and maintenance (O&M) expenses are paid is typically referred to as Net Operating Income (NOI). While financing costs, taxes, and appreciation help to determine the ultimate value of a property, NOI is a good indicator of its basic financial condition. Moreover, changes in NOI are easier to track on an aggregated basis than changes in profitability, which require an individualized examination of return on capital placed at risk.

On average, apartments in buildings containing stabilized units generated \$545 of net income per month in 2020, with units in post-war buildings earning more (\$735 per month) than those in prewar buildings (\$461 per month).

Average monthly, per-unit NOI is greater among stabilized properties in Manhattan (\$721) than for those in the other boroughs: \$563 in Brooklyn; \$518 in Queens; \$412 in Staten Island; and \$366 in the Bronx. There was a notable difference when looking at NOI on a sub-borough level in Manhattan. Core Manhattan properties earned on average \$884 per unit per month in NOI, 72% greater than properties in Upper Manhattan, which earned an average

NOI of \$513. The monthly NOI average calculated Citywide, excluding Core Manhattan, was \$488.

Looking at the NOI using audit-adjusted expense figures, the monthly Citywide NOI in 2020 was \$629 per unit. (See Endnote 8.)

Average monthly unaudited NOI in "residential-only" properties Citywide was \$490 per unit in 2020, 10.2% lower than the average for all buildings containing stabilized units.

NOI reflects the revenue available after payment of operating costs; that is, the amount of money owners have for financing their buildings; making capital improvements; paying income taxes and taking profits. While NOI should not be the only criterion to determine the ultimate profitability of a property, it is a useful exercise to calculate the annual NOI for a hypothetical "average stabilized building" with 11 or more units. Multiplying the average unaudited monthly NOI of \$545 per unit by the typical size of buildings in this year's analysis (an average of 46.2 units) yields an estimated average annual NOI of approximately \$302,000 in 2020. In NYC excluding Core Manhattan, the monthly NOI of \$488 per unit multiplied by the typical size of buildings in this year's analysis outside Core Manhattan (an average of 46.3 units) yields an estimated average annual NOI of approximately \$271,000. (For NOI averages by borough, building age, and size, see details in Appendix 5.)

Operating Cost Ratios

Another way to evaluate the financial condition of buildings that contain rent stabilized units is by measuring the ratio of expenses to revenues. Traditionally, the RGB has used O&M Cost-to-Income and O&M Cost-to-Rent ratios to assess the overall health of the stabilized housing stock, assuming that owners are better off by spending a lower percentage of revenue on expenses. The graph on the next page shows how over the period from 1990 to 2020, the proportion of total income and rent collections spent on audit-adjusted operating costs has fluctuated. The audit-adjusted Cost-to-Income ratio in 2020 was 60.2%, a two-tenths of a point decline from the prior year's 60.4%. This means that on average, owners of rent

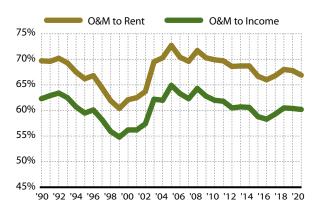
stabilized properties spent roughly 60.2 cents out of every dollar of revenue on operating and maintenance costs in 2020. Looking at unaudited expenses, the Cost-to-Income ratio in 2020 was 65.5, a 0.3 percentage point decline from the prior year. The unaudited median Cost-to-Income ratio was 67% in 2020, up from 66% last year.

Examining the ratio of costs to rent collections, audit-adjusted operating costs in 2020 were 66.9% of revenues from rent, down 0.9 percentage points from the prior year. (See Endnote 8.) Using unaudited expenses, the Cost-to-Rent ratio in 2020 was 72.8%, a full percentage point decline from last year's 73.8%. Looking at the unaudited median Cost-to-Rent ratio, it was 73% in 2020, up from 72% last year.

Rents, income, and costs per unit were on average highest in Core Manhattan in 2020 (see map and graphs on this page). Excluding Core Manhattan, average revenue and costs figures are lower, and have different expense to revenue ratios. In a reversal from prior years, the audit-adjusted Cost-to-Income Ratio for the rest of the City was 59.6%, lower than the Cost-to-Income Ratio for

Ratios of Citywide Average Monthly Audit-Adjusted O&M Costs to Average Monthly Gross Income and Rent 1990-2020

Cost-to-Income and Cost-to-Rent Ratios Decrease in 2020

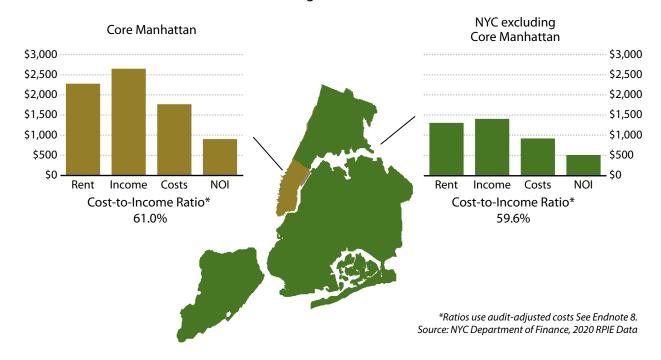


Source: NYC Dept. of Finance, 1990-2020 RPIE Data

buildings in Manhattan's Core (61.0%). (See Endnote 8.) These figures indicate that on average, owners of buildings that contain stabilized units outside of

Average Monthly Rent, Income, Operating Costs, NOI, and Cost-to-Income Ratios, Core Manhattan vs. Rest of the City, 2020

Cost-to-Income Ratio Higher in Core Manhattan This Year



Core Manhattan spend about 1.5 cents less of every dollar of revenue on expenses, as compared to their counterparts in Core Manhattan. This is the first time in the history of the survey that the Cost-to-Income ratio was greater in Core Manhattan than in the rest of the City.

In order to analyze Cost-to-Income ratios in more detail, DOF also calculates this ratio by decile. As previously discussed, half of all buildings containing stabilized units Citywide (or the 50th decile, also know at the median) have unaudited Cost-to-Income ratios of 0.67 or less. This means that half the building owners spent no more than 67 cents out of every dollar of revenue on operating and maintenance costs in 2020. Examining the 30% decile level, three out of every ten building owners Citywide pay no more than 61 cents of every dollar of revenue on operating and maintenance costs,

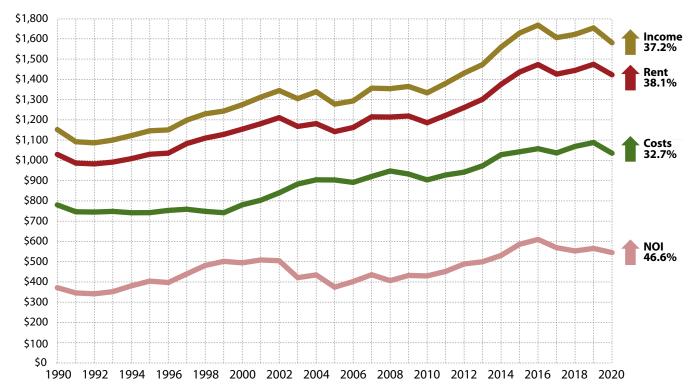
and the remaining seven pay more. Looking at another decile level, 70%, seven out of every ten building owners Citywide pay no more than 75 cents of every dollar of revenue on O&M costs, and the remaining three pay more. The complete table of all ten decile levels Citywide and by borough can be found in Appendix 8.

Net Operating Income After Inflation

The amount of net operating income is a function of the level of expense and the level of revenue in each year (revenues minus operating expenses equals net operating income). Adjusting NOI as well as rent, income and costs figures for inflation (in constant 2020 dollars), and comparing different base years to the latest data available is a useful way to assess the health of the stabilized housing stock

Citywide Income, Rent, Costs, and NOI After Inflation, 1990-2020

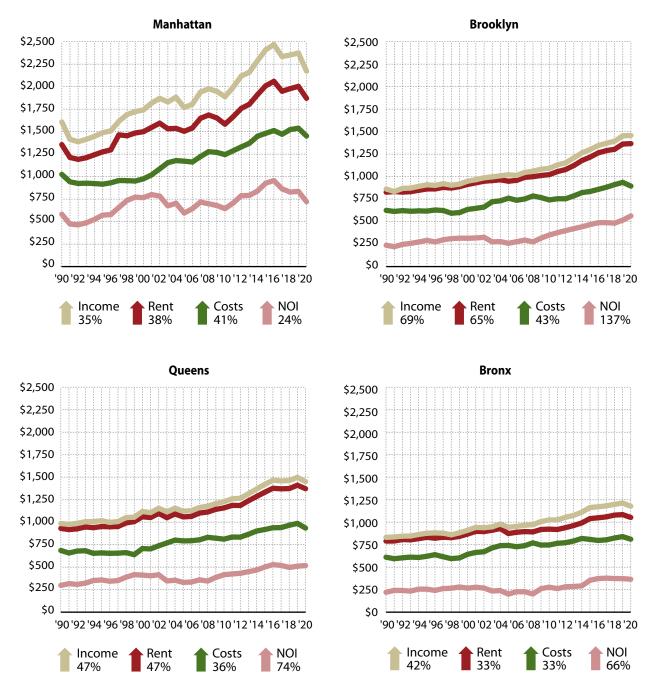
Inflation-Adjusted Net Operating Income Up 46.6% Since 1990 (Average Monthly Income, Rent, Operating Costs, and NOI per Dwelling Unit in Constant 2020 Dollars)



Note: Percent changes are point-to-point measurements.
Sources: NYC Rent Guidelines Board Income and Expense Studies, 1992-2022;
NYC Department of Finance, 1990-2020 RPIE Data

Income, Rent, Costs, and NOI After Inflation per Borough, 1990-2020

Since 1990, Inflation-Adjusted NOI Rises Citywide and in Each Borough (Average Monthly Income, Rent, Operating Costs, and Net Operating Income per Dwelling Unit in Constant 2020 Dollars)



Notes: Percent changes are point-to-point measurements.
Staten Island is excluded due to insufficient data from prior years.
Sources: NYC Rent Guidelines Board Income and Expense Studies, 1992-2022;
NYC Department of Finance, 1990-2020 RPIE Data

because it helps to determine if buildings generate enough revenue to be properly maintained, as well as how well revenues have been meeting or exceeding expenses without erosion by inflation.

Point-to-point comparisons of average figures show that, from 1990 to 2020, after adjusting for inflation, NOI has increased 46.6% (see graph on page 11). This indicates that revenues have outpaced expenses to the extent that average monthly NOI was 46.6% more in 2020 than it was in 1990, after adjusting for inflation.⁹

Rent, income, and costs can be compared similarly. Between 1990 and 2020, inflation-adjusted rent increased a cumulative 38.1%, income by 37.2%, and costs by 32.7%, resulting in the increase in NOI, after inflation, of 46.6%.

While the Citywide graph of inflation-adjusted revenue, expense, and NOI figures is useful for demonstrating the overall stabilized rental housing market, disaggregating the same figures by borough shows how the market can differ from area to area. Looking at the boroughs individually, from 1990 to 2020, all boroughs saw sizable increases in their net income, with Brooklyn seeing the largest increase, with NOI increasing 137%; followed by Queens, up 74%; the Bronx, up 66%; and Manhattan, up 24% (see graphs on previous page).

Longitudinal Analysis

The longitudinal section of this study measures changes in rent, income, costs, operating cost ratios, and net operating income that occurred in the same set of 13,969 buildings from 2019 to 2020.

Rents and Income

Rent collections change for a number of reasons, including increases allowed under RGB guidelines; combining apartments; individual apartments improvements (IAIs); building-wide major capital improvements (MCIs); and varying levels of nonpayment of rent. In addition, with the consequential economic impact of the pandemic, overall market rents fell this year, with the borough of Manhattan hit the hardest. (See Endnote 4.)

Average rent collections in buildings containing stabilized units fell by 3.8% from 2019 to 2020. Rent collections in post-war buildings fell at a lower rate, down 2.9%, than pre-war buildings, which declined by 4.4%. Rent collections fell the most among 11-19 unit buildings, declining 5.6%; followed by large, 100+ unit buildings, down 4.0%; and mid-sized, 20-99 unit buildings, down 3.4%.

Examining rent collections by borough, Staten Island was the only borough to see rent collections increase, up 0.5%. The largest decline was in Manhattan, falling 7.4%; followed by Queens, down 2.1%; the Bronx, down 1.7% and Brooklyn, down 1.2%. Within Manhattan, Core Manhattan rents fell more, down 8.9%, while Upper Manhattan rents fell 4.2%. Rent collections in the City, excluding Core Manhattan, declined 2.0%. The decline in median rent Citywide was 2.8%.

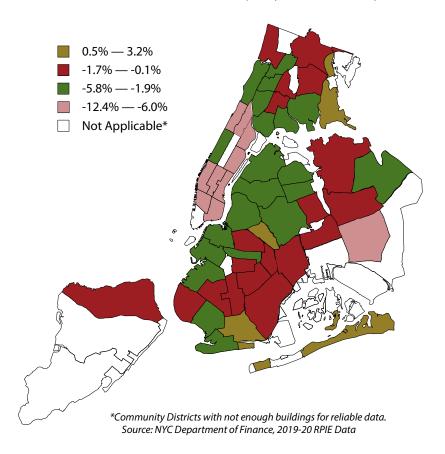
Looking at rent collections throughout New York City, the vast majority of Community Districts saw a decline in average rent from 2019 to 2020.¹⁰

At the neighborhood level, only four neighborhoods saw a growth in average rents: Bushwick, Brooklyn, up 3.2%; Throgs Neck/ Co-op City, Bronx, up 1.4%; and Sheepshead Bay/ Gravesend, Brooklyn and the Rockaways, Queens, both up 0.5%. The remaining districts experienced a decline in average rents, most significantly in Manhattan. Ten of the eleven largest declines in rent occurred in Manhattan neighborhoods. The largest was in Chelsea/Clinton, down 12.4%; Lower East Side/Chinatown, down 12.1%; Midtown, down 11.9%; Greenwich Village, down 11.5%; and Stuyvesant Town/Turtle Bay, down 10.7%. The largest decline in Queens was in Jamaica, down 10.0%. The largest decline in Brooklyn was in Sunset Park, down 5.1%; and the largest decline in the Bronx was in Hunts Point/Longwood, down 3.6%. See map on the next page and Appendix 13 for a breakdown of changes in rent collections by Community District throughout NYC.

The average total income collected in buildings containing stabilized units, comprising apartment rents, commercial rents, and sales of services, fell 4.6% from 2019 to 2020. Revenues fell more in pre-war buildings, down 5.5%, compared to 3.0%

Change in Rent Collections by Community District, 2019-20

Collected Rents Decline in Vast Majority of Community Districts



among post-war buildings.

Similar to the change in collected rent, only Staten Island saw income increase, up 0.4%. The largest income decline was in Manhattan, down 8.9%; followed by Queens, down 2.2%; the Bronx, down 1.9% and Brooklyn, down 1.2%. Within Manhattan, Core Manhattan income fell the most, down 10.7%, while Upper Manhattan income declined 4.7%. Total income in the City, excluding Core Manhattan, fell 2.2%. The median decline in income Citywide was 3.0%.

Operating Costs

Citywide, average expenses in buildings containing stabilized units declined 2.8% from 2019 to 2020. Pre-war buildings saw a larger decline in expenses, down 3.3%, while post-war buildings experienced a

1.8% decline in expenses. However, the change in operating costs varied by borough. Costs fell the most in Manhattan, down 3.9%; followed by Queens, declining 2.5%; Staten Island, down 2.3% and the Bronx and Brooklyn, both falling 2.0%. Within Manhattan, Upper Manhattan costs fell more, falling 4.5%, while costs declined 3.6% in Core Manhattan. Operating costs in the City, excluding Core Manhattan, fell 2.5%. Median Citywide expenses fell 2.6%.

For a detailed breakdown of the changes in rent, income, and costs by building size, age, location, and stabilized unit proportions, see Appendices 10 and 11.

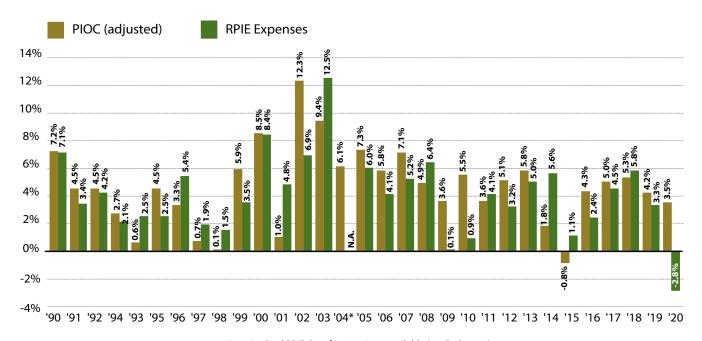
RPIE Expenses and the PIOC

Data sets from the RPIE and the RGB's long-running survey, the Price Index of Operating Costs (PIOC), provide a form of independent verification for the expense data in the other. However, precise comparison of I&E and PIOC

data is somewhat difficult due to differences in the way each instrument defines costs and time periods. For example, there is a difference between when expenses are incurred and paid by owners as reported in the RPIE, versus the price quotes obtained from vendors for specific periods as surveyed in the PIOC. In addition, the PIOC primarily measures prices on a April to March basis, while most RPIE statements filed by landlords are based on the calendar year. (See Endnote 5.) To compare the two, weighted averages of each must be calculated, which may cause a loss in accuracy. Finally, the PIOC measures a hybrid of costs, costweighted prices, and pure prices, whereas the RPIE provides unaudited owner-reported costs. The PIOC grew by 3.5% from 2019 to 2020, the same period as a 2.8% decline in I&E costs, a 6.3 percentage point difference. (See graph on the next page.)

Change in Operating & Maintenance Costs, RPIE and the PIOC, 1990 to 2020

In 2020, PIOC Costs Grew While Owner-Reported RPIE Expenses Declined



*Longitudinal RPIE data for 2004 is unavailable (see Endnote 7).

Sources: NYC Department of Finance, 1990-2020 RPIE Data; RGB Price Index of Costs (PIOC) 1990-2020

From 1990-91 to 2019-20, cumulative growth in owners' costs as measured by the two indices varied. Overall nominal costs measured in the PIOC increased at a greater rate, 252.7%, compared to RPIE data, which grew 204.0% over this period.¹¹

Operating Cost Ratios

Between 2019 and 2020, the proportion of gross income spent on audit-adjusted expenses (the O&M Cost-to-Income ratio) increased, rising by 1.1 percentage points. In addition, the proportion of rental income used for audit-adjusted expenses (the O&M Cost-to-Rent ratio) also increased, up seven-tenths of a percentage point from the prior year. (See Endnote 8.)

Similarly, examining unaudited expense data, the unaudited Cost-to-Income ratio rose by 1.2 percentage points from 2019 to 2020, and the unaudited Cost-to-Rent ratio increased seven-tenths of a percentage point.

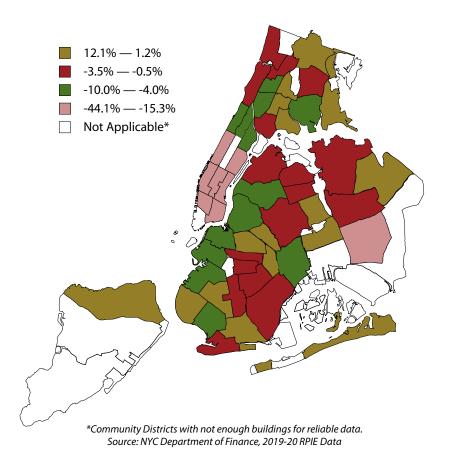
Net Operating Income

Net Operating Income (NOI) refers to the earnings that remain after operating and maintenance (O&M) expenses are paid, but before payments of income tax and debt service. Citywide NOI in buildings containing stabilized units fell by 7.8% between 2019 and 2020. Since 1990-91, when this study first calculated the change in NOI, it has declined just four times: 2001-02, 2002-03, 2017-18 and this year. Citywide, NOI in post-war buildings fell 4.7%, while in older, pre-war buildings, it declined by 9.8%.

The average change in NOI from 2019 to 2020 varied throughout the City. NOI increased in Staten Island, where it rose 6.4%; as well as in Brooklyn, up 0.1%. However, NOI declined 17.5% in Manhattan; 1.8% in the Bronx; and 1.6% in Queens. Within Manhattan, NOI fell 22.0% in Core Manhattan and 5.2% in Upper Manhattan. Monthly NOI in the City, excluding Core Manhattan, fell 1.5%. See Appendix 12 for a breakdown of NOI by borough, building age, and building size.

Change in NOI by Community District, 2019-20

Net Operating Income Declines in 70% of Community Districts



At the Community District level, NOI rose in 30% of the City's neighborhoods. The greatest growth in NOI occurred in Bushwick, Brooklyn, rising 12.1%; followed by Throgs Neck/Co-op City in the Bronx, up 9.7%; the Rockaways, Queens, up 8.7%; E. Tremont/Belmont in the Bronx, up 7.4%; and Kew Gardens/Woodhaven, Queens, up 7.1%. By contrast, not a single Manhattan neighborhood experienced an increase in NOI.

Five neighborhoods in Manhattan saw the greatest drop in NOI: Midtown, down 44.1%; Greenwich Village, down 32.4%; Chelsea/Clinton, down 32.2%; Lower East Side/Chinatown, down 32.1%; and Stuyvesant Town/Turtle Bay, down 26.7%. In each of the other boroughs, the neighborhoods seeing the largest declines were in Jamaica, Queens, down 21.9%; Park Slope/Carroll Gardens, Brooklyn,

down 10.0%; and Highbridge/S. Concourse, the Bronx, down 9.2%. The map on this page and Appendix 13 shows how NOI varied in each neighborhood throughout NYC. (See Endnote 10.)

Summary

This year's main Income and Expense Study includes a sample size of over 14,800 buildings that contain rent stabilized units (a total of over 648,600 units), while the longitudinal study includes almost 14,000 of these buildings (with a total of over 648,600 units). Citywide, average rent fell by 3.8%; collections revenue decreased by 4.6%; and expenses declined by 2.8%. Since income dropped at a greater rate than costs, NOI Citywide declined by 7.8%, the second largest decrease in NOI over the 30-year period of this study. (See table on the next page for historical data.) In addition, the proportion of distressed properties Citywide rose by a full percentage point, to 6.5%. However, the audit-adjusted

Cost-to-Income ratio declined by two-tenths of a percentage points, to 60.2%. (See Endnote 8.)

Methodology

The information in this report was generated by analyzing data sets derived from RPIE forms filed with the NYC Department of Finance in 2021 by owners of apartment buildings with primarily eleven or more dwelling units. The data in these forms, which reflects financial conditions in buildings containing stabilized units for the year 2020, was made available to the RGB beginning in December 2021 for analysis. Unit averages contained in this analysis were computed by the NYC Department of Finance. The averages were then weighted by the RGB using data from the

Changes in Average Monthly Rent, Income, Operating Costs, and Net Operating Income per Dwelling Unit, 1990-2020

Net Operating Income (NOI) Fell from 2019 to 2020, the Fourth Decline in the Last 30 Years

	Avg. Rent	Avg. Income	Avg. Cost Growth	Avg. NOI
1000.01	Growth	Growth		Growth
1990-91	3.4%	3.2%	3.4%	2.8%
1991-92	3.5%	3.1%	4.2%	1.2%
1992-93	3.8%	3.4%	2.1%	6.3%
1993-94	4.5%	4.7%	2.5%	9.3%
1994-95	4.3%	4.4%	2.5%	8.0%
1995-96	4.1%	4.3%	5.4%	2.3%
1996-97	5.4%	5.2%	1.9%	11.4%
1997-98	5.5%	5.3%	1.5%	11.8%
1998-99	5.5%	5.5%	3.5%	8.7%
1999-00	6.2%	6.5%	8.4%	3.5%
2000-01	4.9%	5.2%	4.8%	5.9%
2001-02	4.0%	4.1%	6.9%	-0.1%
2002-03	3.6%	4.5%	12.5%	-8.7%
2003-04	-	-	-	-
2004-05	4.6%	4.7%	6.0%	1.6%
2005-06	5.6%	5.5%	4.1%	8.8%
2006-07	6.5%	6.5%	5.2%	9.3%
2007-08	5.8%	6.2%	6.4%	5.8%
2008-09	1.4%	1.8%	0.1%	5.8%
2009-10	0.7%	1.2%	0.9%	1.8%
2010-11	4.4%	4.5%	4.1%	5.6%
2011-12	5.0%	5.3%	3.2%	9.6%
2012-13	4.5%	4.5%	5.0%	3.4%
2013-14	4.8%	4.9%	5.6%	3.5%
2014-15	4.4%	4.4%	1.1%	10.8%
2015-16	3.1%	3.1%	2.4%	4.4%
2016-17	3.0%	3.0%	4.5%	0.4%
2017-18	3.7%	3.6%	5.8%	-0.6%
2018-19	3.3%	3.2%	3.3%	2.9%
2019-20	-3.8%	-4.6%	-2.8%	-7.8%

2017 NYC Housing and Vacancy Survey, the most recent comprehensive data available, to calculate averages that are representative of the population of residential buildings in New York City. Owners are not required to report tax expenses; therefore, tax figures used in this report were calculated by the NYC Department of Finance. In addition, medians were calculated and included in this report. The medians derived from the data were also produced by the NYC Department of Finance (DOF), were not adjusted by the 2017 HVS, and are unweighted.

Two types of summarized data, primary RPIE data and longitudinal data, were obtained for buildings containing stabilized units. The primary RPIE data, which provides a "snapshot" or "momentin-time" view, comes from properties that filed RPIE forms in 2020, or alternatively, TCIE (Tax Commission Income & Expense) forms.¹² Data from the forms were used to compute average and median rents, operating costs, etc., for 2020. Longitudinal data, which provide a direct comparison of identical elements over time, encompass properties that filed RPIE/TCIE forms for the years 2019 and 2020. The longitudinal data describe changing conditions in average rents, operating costs, etc., by comparing forms from the same buildings over two years. Thus, the main part this report measures conditions existing throughout 2020, while the longitudinal data section measures changes in conditions that occurred from 2019 to 2020.

This year, 14,828 buildings containing rent stabilized units were analyzed in the main RPIE study and 13,969 buildings were examined in the longitudinal study. (There were fewer buildings in the longitudinal study because not all buildings filed and/or could be matched both years.) The collection of buildings was created by matching a list of properties registered with HCR against building data found in 2021 RPIE or TCIE statements (or 2020 and 2021 statements for the longitudinal study). A building is considered rent stabilized if it contains at least one rent stabilized unit.

Once the two data sets were drawn, properties that met the following criteria were not included:

Buildings containing fewer than 11 units.
 Owners of buildings with fewer than 11

- apartments (without commercial units) are not required to file RPIE forms;
- For the main part of this study, owners who did not file an RPIE or TCIE form in 2021; for the longitudinal study, owners who did not file an RPIE or TCIE form in both 2020 and 2021;
- No unit count could be found in RPIE/TCIE records; and
- No apartment rent or income figures were recorded on the RPIE or TCIE forms. In these cases, forms were improperly completed or the building was vacant.

Three additional methods were used to screen the data so properties with inaccurate building information could be removed to protect the integrity of the data:

- In early I&E studies, the NYC Department of Finance used the total number of units from their Real Property Assessment Data (RPAD) files to classify buildings by size and location. RGB researchers found that sometimes the unit counts on RPIE forms were different than those on the RPAD file, and deemed the residential counts from the RPIE form more reliable;
- Average monthly rents for each building were compared to rent intervals for each borough to improve data quality. Properties with average rents outside of the borough rent ranges were removed from all data. Such screening for outliers is critical since such deviations may reflect data entry errors, and thus could skew the analysis; and
- Buildings in which operating costs exceeded income by more than 300% as well as buildings above the 99th percentile or below the 1st percentile were excluded.

As in prior studies, after compiling both data sets, the NYC Department of Finance categorized data reflecting particular types of buildings throughout the five boroughs (e.g., structures with 20-99 units).

Endnotes

- Pre-war buildings refer to those built before 1947; post-war buildings refer to those built after 1946.
- 2. Core Manhattan represents the area south of W 110th and E 96th Streets. Upper Manhattan is the remainder of the borough.
- 3. Preferential rents refer to actual rent paid, which is lower than the "legal rent," or the maximum amount the owner is entitled to charge. Owners can offer preferential rents when the current market cannot bear the legal rent. According to HCR, approximately 33.1% of all 2020 apartment registrations filed indicate a preferential rent. Effective June 2019, the Housing Stability & Tenant Protection Act of 2019 requires preferential rents to remain in effect for the duration of a tenancy, and rent may only be raised to the "legal rent" upon vacancy.
- "The Real Estate Collapse of 2020: Deep Rent Cuts, but Not for All," by Stefanos Chen, The New York Times. December 25, 2020.
- 5. According to the NYC Department of Finance, over 90% of owners filing RPIEs report income and expense data by calendar year. In earlier reports, adjusted HCR data was calculated on a July-to-June fiscal year. Beginning with the 2008 *Income and Expense Study*, adjustment of HCR Citywide data was calculated on the January-to-December calendar year, so figures may differ from data reported in prior years.
- Since the 2008 Income and Expense Study, adjustment of the RGB Rent Index has been calculated on a January-to-December calendar year. Also see Endnote 5.
- 7. RPIE longitudinal data from 2003-04 is excluded from this study because no longitudinal data was available for 2003-04. Therefore, the growth in RPIE collected rents, 209.4%, is understated. To make a more valid comparison between the three indices, cumulative increases in both the RGB Rent Index and HCR contract rent calculations exclude 2003-04 data as well. If 2003-04 data were included, the RGB Rent Index increased 207.9%, and the HCR rent increased 258.4%.
- Despite the length of time since the 1992 audit the RGB feels it is still useful to report audit-adjusted expenses, because the NYC Department of Finance acknowledges some erroneous overstatement of expenses in RPIE filings. Therefore, the RGB reports both audited and unaudited expenses.
- The year 1990 is used as the beginning of a point-to-point comparison because that is the first year in which a greatly expanded base of Real Property Income and Expense (RPIE) data was made available.
- 10. Five Community Districts (CDs) were excluded from this analysis because they contained too few buildings for the data to be reliable. Unlike Citywide and borough level rent and expense data, average CD rents and expenses are unweighted (not adjusted by the 2017 HVS) and do not necessarily represent the entire population of buildings in these Community Districts. All averages were computed by the NYC Department of Finance.
- Due to the unavailability of RPIE longitudinal data for 2003-04,
 PIOC data from 2003-04 is also excluded from this comparison.
- 12. TCIE (Tax Commission Income & Expense) forms are used by the NYC Department of Finance when RPIE forms are not filed by owners. An owner may file a TCIE form when making a claim that their property was incorrectly assessed or improperly denied an exemption from real property tax.

Appendices

1. Average Operating & Maintenance Cost in 2020 per Dwelling Unit per Month by Building Size and Location, Structures Built Before 1947

	<u>Taxes</u>	<u>Labor</u>	<u>Fuel</u>	Water/Sewer	Light & <u>Power</u>	<u>Maint.</u>	Admin.	Insurance	Misc.	<u>Total</u>
Citywide	\$315	\$95	\$74	\$75	\$26	\$164	\$139	\$70	\$40	\$997
11-19 units	\$402	\$93	\$83	\$74	\$30	\$177	\$152	\$70	\$43	\$1,124
20-99 units	\$281	\$82	\$74	\$76	\$25	\$160	\$131	\$71	\$39	\$938
100+ units	\$499	\$224	\$59	\$65	\$33	\$177	\$188	\$63	\$38	\$1,346
Bronx	\$175	\$78	\$84	\$83	\$27	\$148	\$107	\$84	\$22	\$808
11-19 units	\$197	\$96	\$97	\$85	\$31	\$162	\$106	\$85	\$22	\$881
20-99 units	\$174	\$76	\$84	\$83	\$27	\$147	\$106	\$84	\$23	\$804
100+ units	\$176	\$94	\$77	\$89	\$18	\$152	\$113	\$90	\$10	\$820
Brooklyn	\$265	\$71	\$62	\$75	\$19	\$153	\$124	\$63	\$46	\$879
11-19 units	\$299	\$75	\$70	\$73	\$22	\$170	\$134	\$62	\$42	\$946
20-99 units	\$253	\$67	\$61	\$76	\$18	\$149	\$120	\$63	\$49	\$856
100+ units	\$312	\$112	\$53	\$74	\$23	\$167	\$143	\$66	\$30	\$980
Manhattan	\$503	\$137	\$76	\$69	\$33	\$191	\$193	\$68	\$54	\$1,324
11-19 units	\$583	\$112	\$88	\$75	\$38	\$200	\$204	\$78	\$56	\$1,433
20-99 units	\$440	\$106	\$76	\$70	\$29	\$187	\$180	\$67	\$56	\$1,210
100+ units	\$730	\$339	\$59	\$54	\$46	\$199	\$250	\$55	\$40	\$1,773
Queens 11-19 units 20-99 units 100+ units	\$302	\$84	\$70	\$69	\$22	\$154	\$112	\$56	\$35	\$903
	\$284	\$74	\$84	\$66	\$23	\$144	\$91	\$53	\$27	\$847
	\$305	\$78	\$69	\$69	\$22	\$159	\$117	\$56	\$32	\$908
	\$311	\$136	\$51	\$68	\$16	\$143	\$121	\$58	\$67	\$971
Core Man	\$719	\$174	\$65	\$56	\$35	\$200	\$230	\$64	\$56	\$1,597
11-19 units	\$721	\$113	\$77	\$67	\$36	\$204	\$222	\$77	\$54	\$1,573
20-99 units	\$666	\$119	\$63	\$53	\$28	\$193	\$216	\$62	\$60	\$1,459
100+ units	\$856	\$397	\$58	\$47	\$50	\$210	\$277	\$51	\$45	\$1,993
Upper Man 11-19 units 20-99 units 100+ units	\$293 \$312 \$291 -	\$101 \$110 \$98 -	\$87 \$106 \$85 -	\$82 \$90 \$81	\$31 \$42 \$29	\$182 \$191 \$183 -	\$157 \$166 \$156 -	\$71 \$79 \$71 -	\$52 \$58 \$53	\$1,056 \$1,155 \$1,046 -
City w/o Core	\$242	\$81	\$76	\$78	\$25	\$157	\$122	\$71	\$37	\$889
11-19 units	\$282	\$85	\$84	\$77	\$27	\$167	\$126	\$67	\$39	\$953
20-99 units	\$234	\$77	\$76	\$79	\$24	\$156	\$121	\$72	\$37	\$875
100+ units	\$283	\$118	\$59	\$76	\$22	\$157	\$134	\$69	\$34	\$952

Notes: The sum of the lines may not equal the total due to rounding. Totals in this table may not match those in Appendix 3 due to rounding. Data in this table are *not* adjusted for the results of the 1992 NYC Department of Finance audit on I&E reported operating costs. The category "Utilities" used in the I&E Study is the sum of "Water & Sewer" and "Light & Power." The number of Pre-47 rent stabilized buildings with 100+ units in Upper Manhattan, as well as all buildings on Staten Island, was too small to calculate reliable statistics. Owners are not required to report tax expenses; therefore, tax figures used in this report were calculated by the NYC Department of Finance.

2. Average Operating & Maintenance Cost in 2020 per Dwelling Unit per Month by Building Size and Location, Structures Built After 1946

	<u>Taxes</u>	<u>Labor</u>	Fuel	Water/Sewer	Light & <u>Power</u>	Maint.	Admin.	Insurance	Misc.	<u>Total</u>
Citywide	\$346	\$166	\$53	\$63	\$35	\$170	\$175	\$59	\$55	\$1,122
11-19 units	\$261	\$78	\$47	\$56	\$43	\$162	\$126	\$57	\$58	\$889
20-99 units	\$255	\$103	\$55	\$66	\$31	\$161	\$149	\$60	\$45	\$925
100+ units	\$451	\$243	\$52	\$59	\$38	\$180	\$208	\$57	\$65	\$1,354
Bronx	\$173	\$101	\$67	\$75	\$37	\$156	\$122	\$69	\$21	\$820
11-19 units	-	-	-	-	-	-	-	-	-	-
20-99 units	\$177	\$90	\$71	\$75	\$37	\$146	\$114	\$71	\$19	\$800
100+ units	\$169	\$119	\$62	\$74	\$37	\$172	\$134	\$67	\$23	\$858
Brooklyn	\$226	\$117	\$42	\$60	\$33	\$170	\$166	\$60	\$59	\$934
11-19 units	\$220	\$93	\$42	\$55	\$46	\$214	\$159	\$69	\$93	\$991
20-99 units	\$226	\$95	\$44	\$62	\$31	\$179	\$172	\$60	\$54	\$922
100+ units	\$229	\$170	\$40	\$59	\$36	\$145	\$153	\$57	\$62	\$950
Manhattan	\$721	\$338	\$56	\$50	\$46	\$220	\$283	\$56	\$70	\$1,842
11-19 units	\$613	\$88	\$67	\$51	\$51	\$211	\$286	\$62	\$155	\$1,584
20-99 units	\$503	\$157	\$59	\$54	\$38	\$194	\$228	\$60	\$53	\$1,345
100+ units	\$775	\$385	\$55	\$49	\$48	\$227	\$297	\$56	\$74	\$1,964
Queens	\$290	\$126	\$52	\$65	\$29	\$142	\$140	\$53	\$62	\$959
11-19 units	\$284	\$72	\$47	\$57	\$44	\$141	\$106	\$50	\$47	\$847
20-99 units	\$282	\$108	\$56	\$67	\$28	\$145	\$129	\$53	\$49	\$917
100+ units	\$299	\$161	\$48	\$65	\$27	\$139	\$161	\$52	\$82	\$1,034
St. Island	\$195	\$104	\$51	\$61	\$20	\$148	\$129	\$53	\$37	\$799
11-19 units	-	-	-	-	-	-	-	-	-	-
20-99 units	\$227	\$60	\$44	\$48	\$26	\$134	\$167	\$50	\$0	\$755
100+ units	-	-	-	-	-	-	-	-	-	-
Core Man	\$849	\$383	\$57	\$48	\$48	\$223	\$314	\$57	\$83	\$2,062
11-19 units	-	-	-	-	-	-	-	-	-	-
20-99 units	\$712	\$189	\$57	\$48	\$36	\$207	\$252	\$58	\$64	\$1,622
100+ units	\$875	\$420	\$57	\$48	\$50	\$226	\$325	\$57	\$85	\$2,143
Upper Man	\$311	\$193	\$52	\$55	\$39	\$210	\$183	\$54	\$31	\$1,129
11-19 units	-	-	-	-	-	-	-	-	-	-
20-99 units	\$218	\$113	\$62	\$61	\$41	\$175	\$192	\$61	\$39	\$963
100+ units	-	-	-	-	-	-	-	-	-	-
City w/o Core	\$242	\$121	\$52	\$65	\$32	\$159	\$146	\$59	\$49	\$926
11-19 units	\$252	\$78	\$47	\$57	\$43	\$160	\$122	\$56	\$55	\$870
20-99 units	\$230	\$98	\$55	\$67	\$31	\$159	\$143	\$60	\$44	\$887
100+ units	\$259	\$163	\$49	\$64	\$33	\$158	\$155	\$57	\$56	\$992

Notes: The sum of the lines may not equal the total due to rounding. Totals in this table may not match those in Appendix 3 due to rounding. Data in this table are *not* adjusted for the results of the 1992 NYC Department of Finance audit on I&E reported operating costs. The category "Utilities" used in the I&E Study is the sum of "Water & Sewer" and "Light & Power." The number of Post-46 rent stabilized buildings with 11-19 units in the Bronx, Staten Island, Core Manhattan and Upper Manhattan; and 100+ unit buildings in Upper Manhattan and Staten Island, was too small to calculate reliable statistics. Owners are not required to report tax expenses; therefore, tax figures used in this report were calculated by the NYC Department of Finance.

3. Average Rent, Income, and Costs in 2020 per Dwelling Unit per Month by Building Size and Location

	<u>Rent</u>	Post-46 Income	<u>Costs</u>	Rent	Pre-47	<u>Costs</u>	Rent	All Income	<u>Costs</u>
Citywide	\$1,676	\$1,857	\$1,122	\$1,310	\$1,458	\$997	\$1,422	\$1,580	\$1,035
11-19 units	\$1,504	\$1,641	\$889	\$1,371	\$1,613	\$1,124	\$1,390	\$1,617	\$1,090
20-99 units	\$1,438	\$1,561	\$925	\$1,249	\$1,374	\$938	\$1,289	\$1,414	\$936
100+ units	\$1,945	\$2,192	\$1,354	\$1,790	\$2,002	\$1,346	\$1,900	\$2,137	\$1,352
Bronx	\$1,136	\$1,261	\$820	\$1,031	\$1,155	\$808	\$1,053	\$1,177	\$811
11-19 units	-	-	-	\$1,006	\$1,219	\$881	\$1,014	\$1,219	\$872
20-99 units	\$1,111	\$1,217	\$800	\$1,028	\$1,148	\$804	\$1,036	\$1,156	\$803
100+ units	\$1,176	\$1,334	\$858	\$1,151	\$1,250	\$820	\$1,163	\$1,288	\$837
Brooklyn	\$1,632	\$1,764	\$934	\$1,254	\$1,328	\$879	\$1,367	\$1,458	\$895
11-19 units	\$1,676	\$1,857	\$1,122	\$1,312	\$1,423	\$946	\$1,343	\$1,458	\$949
20-99 units	\$1,629	\$1,756	\$922	\$1,229	\$1,296	\$856	\$1,286	\$1,363	\$866
100+ units	\$1,595	\$1,728	\$950	\$1,391	\$1,467	\$980	\$1,527	\$1,641	\$960
Manhattan	\$2,574	\$2,977	\$1,842	\$1,642	\$1,911	\$1,324	\$1,870	\$2,172	\$1,451
11-19 units	\$1,559	\$2,188	\$1,584	\$1,587	\$2,005	\$1,433	\$1,587	\$2,007	\$1,434
20-99 units	\$1,869	\$2,162	\$1,345	\$1,539	\$1,755	\$1,210	\$1,566	\$1,789	\$1,222
100+ units	\$2,753	\$3,180	\$1,964	\$2,256	\$2,607	\$1,773	\$2,585	\$2,986	\$1,900
Queens 11-19 units 20-99 units 100+ units	\$1,426	\$1,524	\$959	\$1,305	\$1,364	\$903	\$1,372	\$1,452	\$934
	\$1,421	\$1,524	\$847	\$1,191	\$1,253	\$847	\$1,223	\$1,291	\$847
	\$1,378	\$1,463	\$917	\$1,315	\$1,371	\$908	\$1,332	\$1,397	\$910
	\$1,484	\$1,595	\$1,034	\$1,435	\$1,506	\$971	\$1,472	\$1,574	\$1,020
St. Island 11-19 units 20-99 units 100+ units	\$1,098 - \$1,182 -	\$1,217 - \$1,403 -	\$799 - \$906 -	- - -	- - -	- - -	\$1,115 - \$1,096 -	\$1,222 - \$1,158 -	\$810 - \$775 -
Core Man	\$2,829	\$3,259	\$2,062	\$1,980	\$2,325	\$1,597	\$2,263	\$2,636	\$1,752
11-19 units	-	-	-	\$1,735	\$2,201	\$1,573	\$1,732	\$2,200	\$1,574
20-99 units	\$2,151	\$2,460	\$1,622	\$1,892	\$2,159	\$1,459	\$1,911	\$2,181	\$1,471
100+ units	\$2,958	\$3,408	\$2,143	\$2,493	\$2,909	\$1,993	\$2,804	\$3,243	\$2,093
Upper Man 11-19 units 20-99 units 100+ units	\$1,751 - \$1,479 -	\$2,063 - \$1,751 -	\$1,129 - \$963 -	\$1,311 \$1,294 \$1,305	\$1,506 \$1,616 \$1,487	\$1,056 \$1,155 \$1,046	\$1,369 \$1,318 \$1,312 \$1,614	\$1,579 \$1,629 \$1,497 \$1,820	\$1,066 \$1,153 \$1,043 \$1,090
City w/o Core	\$1,436	\$1,565	\$926	\$1,224	\$1,311	\$889	\$1,288	\$1,388	\$900
11-19 units	\$1,503	\$1,626	\$870	\$1,199	\$1,289	\$953	\$1,256	\$1,352	\$937
20-99 units	\$1,399	\$1,511	\$887	\$1,211	\$1,291	\$875	\$1,253	\$1,341	\$878
100+ units	\$1,480	\$1,634	\$992	\$1,355	\$1,438	\$952	\$1,447	\$1,581	\$981

Notes: Citywide and borough totals as well as building size categories are weighted (see Methodology). Cost figures in this table are *not* adjusted for the results of the 1992 NYC Department of Finance audit on I&E reported operating costs. The number of Post-46 rent stabilized buildings with 11-19 units in the Bronx, Staten Island, Core Manhattan and Upper Manhattan; and 100+ unit buildings in Upper Manhattan and Staten Island, was too small to calculate reliable statistics. The number of Pre-47 rent stabilized buildings with 100+ units in Upper Manhattan, as well as all Pre-47 buildings on Staten Island, was too small to calculate reliable statistics. In addition, the number of all 11-19 unit and 100+ unit rent stabilized buildings in Staten Island was too small to calculate reliable statistics. Owners are not required to report tax expenses; therefore, tax figures used in this report were calculated by the NYC Department of Finance.

Source: NYC Department of Finance, RPIE Filings

4. Median Rent, Income, and Costs in 2020 per Dwelling Unit per Month by Building Size and Location

	Rent	Post-46 Income	Costs	Rent	Pre-47	<u>Costs</u>	Rent	All Income	<u>Costs</u>
Citywide	\$1,435	\$1,548	\$954	\$1,260	\$1,365	\$933	\$1,280	\$1,389	\$937
11-19 units	\$1,500	\$1,618	\$863	\$1,351	\$1,541	\$1,070	\$1,356	\$1,542	\$1,056
20-99 units	\$1,336	\$1,424	\$893	\$1,226	\$1,316	\$896	\$1,239	\$1,329	\$896
100+ units	\$1,614	\$1,741	\$1,125	\$1,422	\$1,497	\$1,000	\$1,555	\$1,673	\$1,086
Bronx	\$1,115	\$1,193	\$788	\$1,037	\$1,141	\$793	\$1,043	\$1,147	\$793
11-19 units	-	-	-	\$979	\$1,197	\$864	\$991	\$1,196	\$849
20-99 units	\$1,100	\$1,168	\$790	\$1,036	\$1,133	\$787	\$1,040	\$1,137	\$787
100+ units	\$1,156	\$1,297	\$800	\$1,149	\$1,273	\$812	\$1,151	\$1,277	\$809
Brooklyn	\$1,461	\$1,550	\$911	\$1,193	\$1,259	\$840	\$1,221	\$1,289	\$849
11-19 units	\$1,893	\$2,171	\$932	\$1,235	\$1,312	\$892	\$1,249	\$1,332	\$893
20-99 units	\$1,402	\$1,503	\$885	\$1,182	\$1,241	\$821	\$1,201	\$1,263	\$830
100+ units	\$1,422	\$1,515	\$942	\$1,314	\$1,368	\$931	\$1,375	\$1,466	\$941
Manhattan	\$2,326	\$2,666	\$1,609	\$1,586	\$1,804	\$1,220	\$1,625	\$1,846	\$1,245
11-19 units	\$1,657	\$1,989	\$1,383	\$1,599	\$1,951	\$1,364	\$1,600	\$1,951	\$1,367
20-99 units	\$1,917	\$2,121	\$1,274	\$1,555	\$1,719	\$1,138	\$1,582	\$1,741	\$1,146
100+ units	\$2,950	\$3,316	\$2,036	\$2,204	\$2,611	\$1,760	\$2,721	\$3,101	\$1,914
Queens	\$1,396	\$1,476	\$940	\$1,285	\$1,327	\$862	\$1,317	\$1,363	\$886
11-19 units	\$1,327	\$1,382	\$776	\$1,202	\$1,232	\$807	\$1,206	\$1,244	\$804
20-99 units	\$1,353	\$1,421	\$902	\$1,325	\$1,358	\$880	\$1,331	\$1,369	\$886
100+ units	\$1,474	\$1,571	\$1,041	\$1,422	\$1,477	\$947	\$1,457	\$1,551	\$1,009
St. Island 11-19 units 20-99 units 100+ units	\$1,085 - \$1,263 -	\$1,165 - \$1,364 -	\$747 - \$936 -	- - - -	- - -	- - -	\$1,092 - \$1,085 -	\$1,186 - \$1,095 -	\$771 - \$747 -
Core Man	\$2,562	\$2,890	\$1,791	\$1,798	\$2,034	\$1,379	\$1,835	\$2,090	\$1,407
11-19 units	-	-	-	\$1,692	\$2,035	\$1,431	\$1,688	\$2,035	\$1,431
20-99 units	\$2,042	\$2,266	\$1,409	\$1,847	\$2,000	\$1,314	\$1,863	\$2,022	\$1,322
100+ units	\$3,006	\$3,402	\$2,140	\$2,396	\$2,850	\$1,951	\$2,858	\$3,222	\$2,060
Upper Man 11-19 units 20-99 units 100+ units	\$1,573 - \$1,405 -	\$1,681 - \$1,578 -	\$958 - \$903 -	\$1,265 \$1,268 \$1,260 -	\$1,401 \$1,493 \$1,390	\$976 \$1,043 \$963 -	\$1,270 \$1,270 \$1,265 \$1,459	\$1,409 \$1,510 \$1,395 \$1,639	\$976 \$1,041 \$961 \$1,078
City w/o Core	\$1,336	\$1,426	\$888	\$1,162	\$1,248	\$846	\$1,184	\$1,271	\$853
11-19 units	\$1,493	\$1,527	\$818	\$1,189	\$1,289	\$883	\$1,195	\$1,302	\$875
20-99 units	\$1,280	\$1,361	\$860	\$1,153	\$1,235	\$839	\$1,167	\$1,249	\$841
100+ units	\$1,427	\$1,526	\$984	\$1,314	\$1,379	\$890	\$1,370	\$1,466	\$950

Notes: Cost figures in this table are *not* adjusted for the results of the 1992 NYC Department of Finance audit on I&E reported operating The number of Post-46 rent stabilized buildings with 11-19 units in the Bronx, Staten Island, Core Manhattan and Upper Manhattan; and 100+ unit buildings in Upper Manhattan and Staten Island, was too small to calculate reliable statistics. The number of Pre-47 rent stabilized buildings with 100+ units in Upper Manhattan, as well as all buildings on Staten Island, was too small to calculate reliable statistics. In addition, the number of all 11-19 unit and 100+ unit rent stabilized buildings in Staten Island was too small to calculate reliable statistics. Owners are not required to report tax expenses; therefore, tax figures used in this report were calculated by the NYC Department of Finance.

5. Average Net Operating Income in 2020 per Dwelling Unit per Month by Building Size and Location

	Post-46	<u>Pre-47</u>	<u>All</u>			Post-46	<u>Pre-47</u>	<u>All</u>
Citywide 11-19 units 20-99 units 100+ units	\$735 \$752 \$635 \$838	\$461 \$489 \$436 \$656	\$545 \$527 \$478 \$785	11-1 20-9	e Man 19 units 99 units + units	\$1,197 - \$838 \$1,265	\$728 \$628 \$700 \$916	\$884 \$626 \$710 \$1,150
Bronx 11-19 units 20-99 units 100+ units	\$441 - \$417 \$476	\$346 \$338 \$344 \$430	\$366 \$347 \$353 \$451	11-1 20-9	per Man 19 units 99 units + units	\$933 - \$788 -	\$449 \$461 \$441 -	\$513 \$476 \$454 \$730
Brooklyn 11-19 units 20-99 units 100+ units	\$831 \$735 \$834 \$778	\$449 \$477 \$440 \$487	\$563 \$509 \$497 \$681	11-1 20-9	w/o Core 19 units 99 units + units	\$639 \$756 \$624 \$642	\$423 \$337 \$416 \$486	\$488 \$415 \$463 \$600
Manhattan 11-19 units 20-99 units 100+ units	\$1,135 \$604 \$817 \$1,216	\$587 \$572 \$544 \$833	\$721 \$572 \$567 \$1,086					
Queens 11-19 units 20-99 units 100+ units	\$565 \$677 \$546 \$561	\$460 \$406 \$463 \$535	\$518 \$444 \$487 \$554					
St. Island 11-19 units 20-99 units 100+ units	\$418 - \$497 -	- - -	\$412 - \$383 -					

Notes: Citywide and borough totals as well as building size categories are weighted. (See Methodology.) Cost figures used to calculate NOI in this table are *not* adjusted for the results of the 1992 NYC Department of Finance audit on I&E reported operating costs. The number of Post-46 rent stabilized buildings with 11-19 units in the Bronx, Staten Island, Core Manhattan and Upper Manhattan; and 100+ unit buildings in Upper Manhattan and Staten Island, was too small to calculate reliable statistics. The number of Pre-47 rent stabilized buildings with 100+ units in Upper Manhattan, as well as all buildings on Staten Island, was too small to calculate reliable statistics. In addition, the number of all 11-19 unit and 100+ unit rent stabilized buildings in Staten Island was too small to calculate reliable statistics. Owners are not required to report tax expenses; therefore, tax figures used in this report were calculated by the NYC Department of Finance.

Source: NYC Department of Finance, RPIE Filings

6. Distribution of Operating Costs in 2020, by Building Size and Age

	<u>Taxes</u>	Maint.	<u>Labor</u>	Admin.	<u>Utilities</u>	<u>Fuel</u>	Misc.	<u>Insurance</u>	<u>Total</u>
Pre-47	31.6%	16.4%	9.5%	13.9%	10.1%	7.4%	4.0%	7.0%	100.0%
11-19 units	35.8%	15.8%	8.2%	13.5%	9.3%	7.4%	3.8%	6.2%	100.0%
20-99 units	29.9%	17.0%	8.7%	14.0%	10.7%	7.9%	4.2%	7.5%	100.0%
100+ units	37.1%	13.2%	16.6%	14.0%	7.3%	4.4%	2.8%	4.7%	100.0%
Post-46	30.8%	15.2%	14.8%	15.6%	8.7%	4.8%	4.9%	5.2%	100.0%
11-19 units	29.4%	18.2%	8.8%	14.2%	11.2%	5.3%	6.5%	6.4%	100.0%
20-99 units	27.6%	17.4%	11.1%	16.1%	10.5%	6.0%	4.8%	6.5%	100.0%
100+ units	33.3%	13.3%	18.0%	15.4%	7.2%	3.8%	4.8%	4.2%	100.0%
All Bldgs.	31.3%	16.0%	11.3%	14.5%	9.7%	6.5%	4.3%	6.4%	100.0%
11-19 units	35.0%	16.1%	8.3%	13.6%	9.5%	7.1%	4.2%	6.2%	100.0%
20-99 units	29.4%	17.1%	9.2%	14.4%	10.7%	7.5%	4.3%	7.3%	100.0%
100+ units	34.4%	13.2%	17.6%	15.0%	7.2%	4.0%	4.3%	4.3%	100.0%

7. Number of Distressed Buildings in 2020

	<u>Citywide</u>	Bronx	<u>Brooklyn</u>	<u>Manhattan</u>	<u>Queens</u>	Staten Island	Core Manh	Upper Manh
Pre-47								
11-19 units	387	32	65	259	31	0	200	59
20-99 units	497	101	78	263	54	1	149	114
100+ units	7	1	2	3	1	0	3	0
All	891	134	145	525	86	1	352	173
Post-46								
11-19 units	11	2	3	4	1	1	2	2
20-99 units	47	11	10	11	12	3	9	2
100+ units	15	4	2	6	3	0	6	0
All	73	17	15	21	16	4	17	4
All Bldgs.								
11-19 units	398	34	68	263	32	1	202	61
20-99 units	544	112	88	274	66	4	158	116
100+ units	22	5	4	9	4	0	9	0
All	964	151	160	546	102	5	369	177

Note: Distressed buildings are those that have operating and maintenance costs that exceed gross income.

Source: NYC Department of Finance, RPIE Filings

8. Operating Cost-to-Income Ratios by Decile in 2020

	# of Bldgs	<u>10%</u>	<u>20%</u>	<u>30%</u>	<u>40%</u>	<u>50%</u>	<u>60%</u>	<u>70%</u>	<u>80%</u>	90%	<u>100%</u>
Citywide	14,828	0.51	0.57	0.61	0.64	0.67	0.71	0.75	0.81	0.93	2.97
Manhattan	6,082	0.52	0.57	0.61	0.64	0.67	0.71	0.77	0.85	0.98	2.97
Bronx	3,018	0.54	0.59	0.63	0.66	0.69	0.73	0.77	0.82	0.91	1.98
Brooklyn	3,566	0.49	0.55	0.59	0.62	0.65	0.69	0.72	0.77	0.87	2.07
Queens	2,077	0.51	0.55	0.59	0.62	0.65	0.68	0.72	0.78	0.89	2.65
St. Island	85	0.51	0.57	0.62	0.64	0.65	0.67	0.69	0.76	0.90	1.36

9. Number of Buildings and Dwelling Units in 2020 by Building Size and Location

	Pos	st-46	Pre	e-47	A	AII
	Bldgs.	<u>DUs</u>	Bldgs.	<u>DUs</u>	Bldgs.	<u>DUs</u>
Citywide 11-19 units 20-99 units 100+ units	2,097 194 1,250 653	215,824 2,856 69,091 143,877	12,731 3,455 8,935 341	468,773 52,312 356,378 60,083	14,828 3,649 10,185 994	684,597 55,168 425,469 203,960
Bronx	348	25,422	2,670	117,081	3,018	142,503
11-19 units	21	324	300	4,572	321	4,896
20-99 units	269	15,393	2,302	102,969	2,571	118,362
100+ units	58	9,705	68	9,540	126	19,245
Brooklyn	530	47,754	3,036	107,820	3,566	155,574
11-19 units	49	735	904	13,509	953	14,244
20-99 units	348	19,477	2,066	86,387	2,414	105,864
100+ units	133	27,542	66	7,924	199	35,466
Manhattan	513	78,961	5,569	185,467	6,082	264,428
11-19 units	50	731	1,849	28,008	1,899	28,739
20-99 units	219	11,132	3,579	125,081	3,798	136,213
100+ units	244	67,098	141	32,378	385	99,476
Queens 11-19 units 20-99 units 100+ units	645	59,381	1,432	57,096	2,077	116,477
	63	910	394	6,097	457	7,007
	378	21,637	977	41,502	1,355	63,139
	204	36,834	61	9,497	265	46,331
St. Island	61	4,306	24	1,309	85	5,615
11-19 units	11	156	8	126	19	282
20-99 units	36	1,452	11	439	47	1,891
100+ units	14	2,698	5	744	19	3,442
Core Man	418	70,804	3,650	115,127	4,068	185,931
11-19 units	32	487	1,498	22,676	1,530	23,163
20-99 units	162	8,308	2,041	64,461	2,203	72,769
100+ units	224	62,009	111	27,990	335	89,999
Upper Man	95	8,157	1,919	70,340	2,014	78,497
11-19 units	18	244	351	5,332	369	5,576
20-99 units	57	2,824	1,538	60,620	1,595	63,444
100+ units	20	5,089	30	4,388	50	9,477

Note: DU = Dwelling Unit

10. Longitudinal Income and Expense Study, Estimated Average Rent, Income, and Costs Changes (2019-2020) by Building Size and Location

		Post-46			Pre-47			All	
	Rent	<u>Income</u>	Costs	Rent	Income	Costs	Rent	<u>Income</u>	<u>Costs</u>
Citywide	-2.9%	-3.0%	-1.8%	-4.4%	-5.5%	-3.3%	-3.8%	-4.6%	-2.8%
11-19 units	-1.8%	-0.9%	0.2%	-6.3%	-8.4%	-3.8%	-5.6%	-7.4%	-3.3%
20-99 units	-1.7%	-1.8%	-2.7%	-4.0%	-4.9%	-3.3%	-3.4%	-4.2%	-3.2%
100+ units	-3.8%	-4.0%	-1.3%	-4.5%	-5.5%	-2.9%	-4.0%	-4.4%	-1.8%
Bronx	0.0%	0.4%	-1.4%	-2.2%	-2.6%	-2.1%	-1.7%	-1.9%	-2.0%
11-19 units	-	-	-	-2.8%	-1.9%	-3.2%	0.0%	0.6%	-3.1%
20-99 units	-2.0%	-1.4%	-2.2%	-2.2%	-2.6%	-2.1%	-2.2%	-2.4%	-2.1%
100+ units	1.9%	2.0%	-0.2%	-0.3%	-1.7%	-2.1%	1.4%	1.1%	-0.7%
Brooklyn	0.7%	0.9%	-2.5%	-2.2%	-2.3%	-1.7%	-1.2%	-1.2%	-2.0%
11-19 units	-1.9%	1.4%	-0.8%	-3.1%	-3.7%	-1.4%	-2.9%	-2.9%	-1.3%
20-99 units	0.2%	0.4%	-3.0%	-2.0%	-2.0%	-1.8%	-1.3%	-1.3%	-2.2%
100+ units	2.5%	2.0%	-1.7%	-2.4%	-2.2%	-1.2%	0.7%	0.5%	-1.5%
Manhattan	-7.2%	-7.4%	-1.2%	-7.6%	-9.6%	-5.1%	-7.4%	-8.9%	-3.9%
11-19 units	-4.4%	-6.9%	2.9%	-9.5%	-12.8%	-5.3%	-9.4%	-12.7%	-5.2%
20-99 units	-6.6%	-7.6%	-2.2%	-7.4%	-9.2%	-5.4%	-7.3%	-9.1%	-5.2%
100+ units	-7.3%	-7.3%	-1.0%	-6.3%	-7.5%	-3.6%	-7.0%	-7.4%	-1.9%
Queens	-1.8%	-1.8%	-2.3%	-2.5%	-2.7%	-2.7%	-2.1%	-2.2%	-2.5%
11-19 units	-4.0%	-3.9%	0.8%	-3.5%	-3.4%	-2.4%	-3.7%	-3.7%	-1.2%
20-99 units	-2.1%	-2.3%	-2.7%	-2.5%	-2.8%	-3.0%	-2.3%	-2.5%	-2.9%
100+ units	-0.9%	-0.7%	-2.4%	-0.9%	-1.3%	-1.8%	-0.9%	-0.8%	-2.3%
St. Island	0.9%	0.7%	-1.5%	-	-	-	0.5%	0.4%	-2.3%
11-19 units	-	-	-	-	-	-	-	-	-
20-99 units	-	-	-	-	-	-	0.5%	0.2%	-3.6%
100+ units	-	-	-	-	-	-	-	-	-
Core Man	-7.9%	-8.3%	-1.6%	-9.5%	-12.2%	-4.9%	-8.9%	-10.7%	-3.6%
11-19 units	-	-	-	-10.4%	-14.7%	-5.5%	-10.3%	-14.6%	-5.4%
20-99 units	-7.7%	-9.6%	-2.3%	-10.3%	-13.1%	-5.3%	-10.0%	-12.7%	-4.9%
100+ units	-8.0%	-8.1%	-1.5%	-7.1%	-8.2%	-3.7%	-7.7%	-8.2%	-2.2%
Upper Man	-3.2%	-2.3%	1.3%	-4.5%	-5.2%	-5.4%	-4.2%	-4.7%	-4.5%
11-19 units	-	-	-	-7.0%	-7.1%	-4.8%	-7.0%	-7.1%	-4.8%
20-99 units	-4.2%	-3.3%	-2.0%	-4.3%	-5.1%	-5.6%	-4.3%	-5.0%	-5.4%
100+ units	-	-	-	-	-	-	-2.2%	-2.0%	0.7%
City w/o Core	-0.6%	-0.4%	-1.9%	-2.7%	-3.1%	-2.8%	-2.0%	-2.2%	-2.5%
11-19 units	-1.8%	-0.6%	0.1%	-3.9%	-4.2%	-2.7%	-3.5%	-3.5%	-2.2%
20-99 units	-1.1%	-1.0%	-2.7%	-2.6%	-3.0%	-2.9%	-2.2%	-2.5%	-2.9%
100+ units	0.2%	0.3%	-1.1%	-1.4%	-1.9%	-1.8%	-0.2%	-0.2%	-1.3%

Notes: Citywide and borough totals as well as building size categories are weighted. (See Methodology.) Cost figures in this table are *not* adjusted for the results of the 1992 NYC Department of Finance audit on I&E reported operating costs. The number of Post-46 rent stabilized buildings with 11-19 units in the Bronx, Staten Island, Core Manhattan and Upper Manhattan, as well as 20-99 and 100+ unit buildings on Staten Island and 100+ units buildings in Upper Manhattan was too small to calculate reliable statistics. The number of Pre-47 rent stabilized buildings in all categories in Staten Island as well as 100+ unit buildings in Upper Manhattan was too small to calculate reliable statistics. In addition, the number of all 11-19 unit and 100+ unit rent stabilized buildings in Staten Island was too small to calculate reliable statistics. Owners are not required to report tax expenses; therefore, tax figures used in this report were calculated by the NYC Department of Finance.

11. Longitudinal Income and Expense Study, Estimated Median Rent, Income, and Costs Changes (2019-2020) by Building Size and Location

Post-46	6		Pre-47			All	
Rent Income	<u>Costs</u>	Rent	Income	<u>Costs</u>	Rent	<u>Income</u>	Costs
Citywide -0.3% 0.1%	-2.4%	-2.9%	-3.3%	-2.7%	-2.8%	-3.0%	-2.6%
11-19 units 2.6% 3.1%	-3.7%	-5.2%	-7.2%	-2.9%	-5.0%	-6.8%	-2.5%
20-99 units -1.2% -1.6%	-2.3%	-2.9%	-3.0%	-2.9%	-2.7%	-2.7%	-2.9%
100+ units 1.2% 0.6%	-2.7%	-1.0%	-2.5%	-2.0%	0.2%	0.8%	-2.0%
Bronx -1.9% -1.5%	-0.6%	-2.4%	-2.2%	-2.1%	-2.3%	-1.9%	-2.1%
11-19 units	-	-6.3%	-0.4%	-4.1%	-4.2%	0.3%	-3.3%
20-99 units -3.1% -3.0%	-1.4%	-2.4%	-2.2%	-2.0%	-2.4%	-2.2%	-1.9%
100+ units -0.4% -1.4%	2.6%	-0.4%	-2.5%	-3.4%	-0.6%	-2.7%	-3.3%
Brooklyn 1.8% 1.1%	-0.8%	-2.1%	-1.6%	-2.0%	-1.5%	-1.1%	-2.0%
11-19 units 4.8% -0.6%	-3.7%	-0.8%	-1.2%	-0.9%	-0.4%	-2.0%	-1.0%
20-99 units 0.1% -0.5%	-1.4%	-1.9%	-1.6%	-1.9%	-2.0%	-1.3%	-2.0%
100+ units 2.3% 3.1%	-0.2%	-3.5%	-2.5%	0.0%	-1.0%	0.2%	0.5%
Manhattan -7.8% -7.8%	-3.2%	-8.9%	-10.0%	-4.5%	-8.7%	-10.0%	-4.1%
11-19 units -6.1% 10.8%	0.3%	-11.1%	-11.9%	-4.7%	-10.7%	-11.4%	-4.3%
20-99 units -7.8% -7.7%	-2.6%	-7.8%	-9.0%	-5.0%	-7.8%	-8.9%	-4.6%
100+ units -7.2% -8.2%	-0.2%	-6.1%	-6.0%	-5.3%	-6.3%	-7.7%	-2.3%
Queens -1.5% -1.4%	-2.3%	-3.0%	-2.7%	-3.3%	-2.6%	-3.1%	-2.7%
11-19 units -3.9% -4.0%	1.0%	-2.5%	-3.5%	-2.8%	-2.8%	-3.1%	-2.1%
20-99 units -1.5% -2.6%	-3.8%	-2.4%	-3.0%	-3.7%	-2.3%	-3.2%	-3.6%
100+ units -0.2% -1.0%	-2.2%	-1.7%	-0.5%	-0.9%	-0.6%	-0.8%	-2.1%
St. Island -0.3% 0.9%	-3.9%	-	-	-	-1.8%	0.9%	-5.2%
11-19 units	-	-	-	-	-	-	-
20-99 units	-	-	-	-	-2.0%	-3.1%	-0.1%
100+ units	-	-	-	-	-	-	-
Core Man -6.4% -8.0%	-0.9%	-9.9%	-12.3%	-4.8%	-9.8%	-12.3%	-4.7%
11-19 units -7.4% 11.3%	-0.6%	-10.8%	-13.8%	-5.1%	-10.9%	-13.4%	-5.1%
20-99 units -9.1% -9.0%	-1.3%	-9.5%	-12.2%	-5.2%	-9.4%	-11.8%	-5.0%
100+ units -6.9% -8.4%	2.3%	-11.3%	-9.0%	-2.8%	-7.6%	-8.2%	0.6%
Upper Man -0.7% -3.9%	-5.4%	-3.3%	-4.4%	-3.7%	-3.4%	-4.6%	-4.0%
11-19 units	-	-3.6%	-6.8%	-7.2%	-3.4%	-6.3%	-7.3%
20-99 units 1.1% -1.6%	-0.2%	-3.6%	-4.3%	-4.2%	-3.5%	-4.1%	-4.1%
100+ units	-	0.8%	-1.8%	-2.8%	-0.3%	-1.3%	-0.8%
All City w/o Core -0.7% -0.8%	-2.0%	-2.4%	-2.5%	-3.0%	-2.4%	-2.0%	-2.7%
11-19 units 5.7% 3.0%	-1.6%	-2.4%	-1.7%	-1.5%	-2.5%	-2.0%	-2.2%
20-99 units -1.4% -1.6%	-2.1%	-2.5%	-2.4%	-2.9%	-2.6%	-2.3%	-2.9%
100+ units 0.1% 0.4%	-1.9%	-0.6%	-1.1%	0.5%	-0.8%	-0.3%	-1.6%

Notes: Cost figures in this table are *not* adjusted for the results of the 1992 NYC Department of Finance audit on I&E reported operating costs. The number of Post-46 rent stabilized buildings with 11-19 units in the Bronx, Staten Island, Core Manhattan and Upper Manhattan, as well as 20-99 and 100+ unit buildings on Staten Island and 100+ units buildings in Upper Manhattan was too small to calculate reliable statistics. The number of Pre-47 rent stabilized buildings in all categories in Staten Island as well as 100+ unit buildings in Upper Manhattan was too small to calculate reliable statistics. In addition, the number of all 11-19 unit and 100+ unit rent stabilized buildings in Staten Island was too small to calculate reliable statistics. Owners are not required to report tax expenses; therefore, tax figures used in this report were calculated by the NYC Department of Finance.

12. Longitudinal Income and Expense Study, Average Net Operating Income Changes (2019-2020) by Building Size & Location

	Post-46	<u>Pre-47</u>	<u>All</u>		Post-46	<u>Pre-47</u>	<u>All</u>
Citywide 11-19 units 20-99 units 100+ units	-4.7% -2.1% -0.4% -8.1%	-9.8% -17.5% -8.1% -10.4%	-7.8% -14.7% -6.0% -8.7%	Core Man 11-19 units 20-99 units 100+ units	-18.0% - -20.8% -17.7%	-24.9% -31.3% -25.9% -16.7%	-22.0% -31.2% -25.2% -17.4%
Bronx 11-19 units 20-99 units 100+ units	3.9% - 0.0% 6.3%	-3.6% 1.5% -3.9% -0.9%	-1.8% 10.1% -3.3% 4.6%	Upper Man 11-19 units 20-99 units 100+ units	-6.5% - -4.9% -	-4.8% -12.5% -4.0%	-5.2% -12.5% -4.1% -5.5%
Brooklyn 11-19 units 20-99 units 100+ units	5.2% 3.5% 4.7% 6.9%	-3.5% -8.1% -2.4% -4.1%	0.1% -5.6% 0.3% 3.6%	City w/o Core 11-19 units 20-99 units 100+ units	1.8% -1.5% 1.6% 2.6%	-3.6% -7.4% -3.2% -1.9%	-1.5% -5.8% -1.8% 1.6%
Manhattan 11-19 units 20-99 units 100+ units	-16.1% -25.4% -15.2% -16.1%	-18.3% -27.1% -16.7% -14.7%	-17.5% -27.1% -16.5% -15.8%				
Queens 11-19 units 20-99 units 100+ units	-0.9% -9.3% -1.5% 2.6%	-2.6% -5.5% -2.3% -0.4%	-1.6% -7.5% -1.9% 2.1%				
St. Island 11-19 units 20-99 units 100+ units	5.4% - - -	- - - -	6.4% - 8.6% -				

Notes: Citywide and borough totals as well as building size categories are weighted (see Methodology). Cost figures used to calculate NOI in this table are *not* adjusted for the results of the 1992 NYC Department of Finance audit on I&E reported operating costs. The number of Post-46 rent stabilized buildings with 11-19 units in the Bronx, Staten Island, Core Manhattan and Upper Manhattan, as well as 20-99 and 100+ unit buildings on Staten Island and 100+ units buildings in Upper Manhattan was too small to calculate reliable statistics. The number of Pre-47 rent stabilized buildings in all categories in Staten Island as well as 100+ unit buildings in Upper Manhattan was too small to calculate reliable statistics. In addition, the number of all 11-19 unit and 100+ unit rent stabilized buildings in Staten Island was too small to calculate reliable statistics. Owners are not required to report tax expenses; therefore, tax figures used in this report were calculated by the NYC Department of Finance.

13. Longitudinal Income and Expense Study, Change in Rent and Net Operating Income by Community District (2019-2020)

<u>CD</u>	Neighborhood	Rent Change	NOI Change
Manhattan			
102	Greenwich Village	-11.5%	-32.4%
103	Lower East Side/Chinatown	-12.1%	-32.1%
104	Chelsea/Clinton	-12.4%	-32.2%
105	Midtown	-11.9%	-44.1%
106	Stuyvesant Town/Turtle Bay	-10.7%	-26.7%
107	Upper West Side	-5.8%	-15.3%
108	Upper East Side	-8.0%	-18.8%
109	Morningside Hts./Hamilton Hts.	-6.0%	-9.2%
110	Central Harlem	-7.7%	-9.0%
111	East Harlem	-6.6%	-8.9%
112	Washington Hts./Inwood	-2.8%	-1.4%
Bronx			
201	Mott Haven/Port Morris	-2.4%	-0.9%
202	Hunts Point/Longwood	-3.6%	1.4%
203	Morrisania/Melrose/Claremont	-0.9%	2.3%
204	Highbridge/S. Concourse	-3.0%	-9.2%
205	University Heights/Fordham	-2.9%	-5.5%
206	E. Tremont/Belmont	-0.8%	7.4%
207	Kingsbridge Hts./Mosholu/Norwood	-2.2%	-3.5%
208	Riverdale/Kingsbridge	-1.1%	-0.5%
209	Soundview/Parkchester	-2.0%	-5.3%
210	Throgs Neck/Co-op City	1.4%	9.7%
210	Pelham Parkway	-1.2%	-0.5%
212	Williamsbridge/Baychester	-1.2%	1.7%
212	Williamsbridge/baychester	-1.270	1.770
Brooklyn			
301	Williamahura/Craannaint	-4.3%	-5.0%
	Williamsburg/Greenpoint Brooklyn Hts./Fort Greene		
302		-2.6%	-7.6%
303	Bedford Stuyvesant	-1.6%	1.7%
304	Bushwick	3.2%	12.1%
305	East New York/Starett City	-1.7%	-9.3%
306	Park Slope/Carroll Gardens	-4.5%	-10.0%
307	Sunset Park	-5.1%	-6.4%
308	North Crown Hts./Prospect Hts.	-2.0%	-0.7%
309	South Crown Hts.	-1.5%	-2.1%
310	Bay Ridge	-1.5%	1.6%
311	Bensonhurst	-2.8%	-4.0%
312	Borough Park	-0.5%	1.2%
313	Coney Island	-2.0%	-2.8%
314	Flatbush	-1.3%	-1.5%
315	Sheepshead Bay/Gravesend	0.5%	4.6%
316	Brownsville/Ocean Hill	-0.1%	4.6%
317	East Flatbush	-0.8%	-2.8%
318	Flatlands/Canarsie	-1.3%	-3.2%
Queens			
401	Astoria	-2.4%	-3.1%
402	Sunnyside/Woodside	-2.3%	-4.5%
403	Jackson Hts.	-2.5%	-2.8%
404	Elmhurst/Corona	-3.3%	-3.1%
405	Middle Village/Ridgewood	-2.4%	-0.5%
406	Forest Hills/Rego Park	-0.2%	4.6%
407	Flushing/Whitestone	-1.6%	-2.9%
408	Hillcrest/Fresh Meadows	-1.2%	-3.5%
409	Kew Gardens/Woodhaven	-1.2%	7.1%
411	Bayside/Little Neck	-1.9%	3.6%
412	Jamaica	-10.0%	-21.9%
414	Rockaways	0.5%	8.7%
717	Hoonaways	0.5/0	0.7 /0
Staten Island			
501	North Shore	-0.3%	1.9%
		0.070	,-

Note: Five Community Districts (CDs) contained too few buildings to be included in the analysis. Excluded CD's are Financial District, Manhattan; Howard Beach/S. Ozone Park and Bellrose/Rosedale, Queens; and Mid-Island and South Shore, Staten Island.

14. Longitudinal Analysis, Number of Buildings and Dwelling Units in 2019 & 2020, by Building Size and Location

	Pos	st-46	Pre	-47	All	
	Bldgs.	<u>DUs</u>	Bldgs.	<u>DUs</u>	Bldgs.	<u>DUs</u>
Citywide 11-19 units 20-99 units 100+ units	1,934 168 1,149 617	201,620 2,473 64,701 134,446	12,035 3,176 8,532 327	446,940 48,107 341,957 56,876	13,969 3,344 9,681 944	648,560 50,580 406,658 191,322
Bronx	321	23,973	2,546	112,161	2,867	136,134
11-19 units	16	248	275	4,212	291	4,460
20-99 units	249	14,334	2,207	98,917	2,456	113,251
100+ units	56	9,391	64	9,032	120	18,423
Brooklyn	469	43,229	2,851	102,808	3,320	146,037
11-19 units	39	585	818	12,214	857	12,799
20-99 units	306	17,821	1,969	82,991	2,275	100,812
100+ units	124	24,823	64	7,603	188	32,426
Manhattan	479	73,647	5,249	176,509	5,728	250,156
11-19 units	45	657	1,715	25,964	1,760	26,621
20-99 units	207	10,571	3,398	119,131	3,605	129,702
100+ units	227	62,419	136	31,414	363	93,833
Queens	610	56,890	1,365	54,153	1,975	111,043
11-19 units	58	843	360	5,591	418	6,434
20-99 units	354	20,591	947	40,479	1,301	61,070
100+ units	198	35,456	58	8,083	256	43,539
St. Island	55	3,881	24	1,309	79	5,190
11-19 units	10	140	8	126	18	266
20-99 units	33	1,384	11	439	44	1,823
100+ units	12	2,357	5	744	17	3,101
Core Man	395	66,256	3,452	109,925	3,847	176,181
11-19 units	32	487	1,406	21,265	1,438	21,752
20-99 units	154	7,896	1,939	61,323	2,093	69,219
100+ units	209	57,873	107	27,337	316	85,210
Upper Man	84	7,391	1,797	66,584	1,881	73,975
11-19 units	13	170	309	4,699	322	4,869
20-99 units	53	2,675	1,459	57,808	1,512	60,483
100+ units	18	4,546	29	4,077	47	8,623

Note: DU = Dwelling Unit