# 2020 Income and Expense Study April 15, 2020

### **Board Members**

Chair: David Reiss

**Public Members:** Christina DeRose • Christian Gonzalez-Rivera Cecilia Joza • Alex Schwartz

Owner Members: Patti Stone • Scott Walsh

Tenant Members: Sheila Garcia • Leah Goodridge

### **Staff Members**

Executive Director: Andrew McLaughlin

**Research Director:** Brian Hoberman

Deputy Research Director: Danielle Burger

**Office Manager:** Charmaine Superville



## New York City Rent Guidelines Board

# 2020 Income and Expense Study

04	Introduction	What's New
04	RPIE Study	This study, published in April 2020, focuses on data from 2018 and prior years. Due to the as-yet-unknown full
13	Longitudinal Study	impact of the COVID-19 virus, it does not reflect the current economic condition of the New York City rental market and should not be interpreted as such. Future editions of this study will illustrate some of the hardships that our follow New Yorkers may be experiencing new
16	Summary	that our fellow New Yorkers may be experiencing now and in the future.
18	Methodology	From 2017 to 2018, Net Operating Income (revenue remaining after operating expenses are paid) declined 0.6%. This is the first time NOI has declined since 2002- 2003.
20	Appendices	Rental income increased an average of 3.7% from 2017-2018.
		Total income increased an average of 3.6% from 2017-2018.
		Operating costs increased an average of 5.8% from 2017-2018.

#### 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) has analyzed the cost of operating and maintaining rental housing in New York City since 1969. Historically, the Board's primary instrument for measuring changes in prices and costs has been 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.

In 1990, the RGB began utilizing a new data source that has greatly expanded the information base used in the rent adjustment-setting process: Real Property Income and Expense (RPIE) statements from rent stabilized buildings 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 2018, the year for which the most recent data set is available, and the extent to which these conditions changed from the prior year, 2017.

#### 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 rent stabilized buildings. To ensure only buildings that contain rent stabilized units are analyzed (see Methodology section for further details), the NYC Department of Finance releases to the RGB summary data 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 15,012 properties containing 675,924 units.

### **RPIE Study**

#### **Rents and Income**

RPIE rent figures include money collected for apartments (both rent regulated and unregulated), owner-occupied or related space and government subsidies. In 2018, rent stabilized property owners collected monthly rent averaging \$1,397 per unit. As in previous years, units in pre-war buildings rented for less on average (\$1,323 per month) than those in post-war buildings (\$1,563 per month).<sup>1</sup> At the borough level, the average monthly rents in stabilized buildings were \$1,913 in Manhattan (\$2,308 in Core Manhattan<sup>2</sup> and \$1,408 in Upper Manhattan); \$1,329 in Queens; \$1,261 in Brooklyn; \$1,115 in Staten Island; and \$1,044 in the Bronx. Average monthly rent per unit in the City, excluding Core Manhattan, was \$1,242.

The median monthly rent Citywide was \$1,260 in 2018. At the borough level, median rent was \$1,702 in Manhattan (\$1,960 in Core Manhattan and \$1,289 in Upper Manhattan); \$1,295 in Queens; \$1,180 in Brooklyn; \$1,091 in Staten Island; and \$1,043 in the Bronx. Median monthly rent per unit in the City, excluding Core Manhattan, was \$1,164.

Many owners of stabilized buildings supplement income from their apartment rents by selling services to their tenants as well as by renting commercial space. Income encompasses all revenue from rent, including commercial rent, sales of services, such as laundry, parking, and vending, and all other operating income. Current RPIE filings show an average monthly gross income of \$1,568 per unit in 2018, with pre-war buildings earning \$1,489 per unit and post-war properties earning \$1,748 per unit. Gross income was highest in Manhattan, at \$2,274 per unit per month (\$2,773 in Core Manhattan, and \$1,636 in Upper Manhattan) and lowest in the Bronx, at \$1,159. In between were Queens, at \$1,415, Brooklyn, at \$1,348; and Staten Island, at \$1,196. Monthly income per unit in the City, excluding Core Manhattan, was \$1,340. These gross income figures encompass rent from apartments as well as the sale of services (e.g., laundry, parking) and commercial income (e.g., retail, cell towers, billboards). Such proceeds accounted for an 11.0% share of the total income earned by building owners in 2018, down two-tenths of a percentage point from the previous year. By borough, income earned from services and commercial rents was 15.9% in Manhattan (16.8% in Core Manhattan and 13.9% in Upper Manhattan); 9.9% in the Bronx; 6.8% in Staten Island; 6.4% in Brooklyn; and 6.1% in Queens. In the City excluding Core Manhattan, the proportion was 7.3%. The graph on this page shows the average rent and income collected in 2018 by

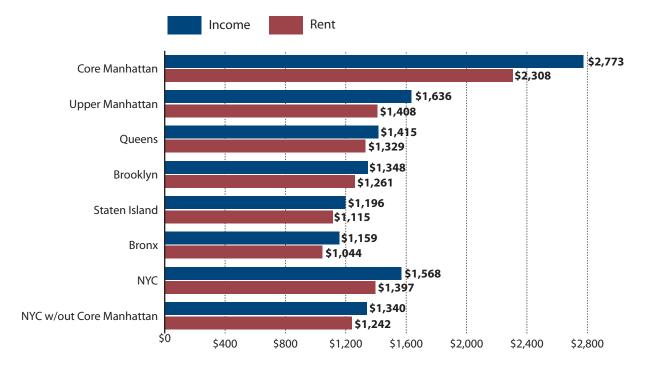
borough, and for the City.

Median Citywide income for owners in 2018 was \$1,359. At the borough level, Manhattan had the highest median income, at \$1,962 (\$2,287 in Core Manhattan and \$1,462 in Upper Manhattan); followed by Queens at \$1,347; Brooklyn at \$1,238; Staten Island at \$1,179; and the Bronx at \$1,131. Median monthly income per unit in the City, excluding Core Manhattan, was \$1,244. (For rent and income averages and medians by borough and building age and size, see details in Appendices 3 and 4.)

#### **Comparing Rent Measurements**

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

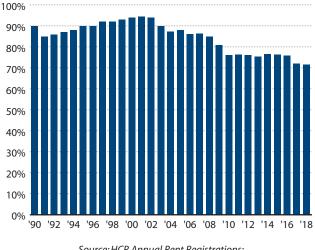
#### Average Monthly Collected Income/Rent per Dwelling Unit by Borough\*



#### Income and Rent Highest in Manhattan in 2018

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, 2018 RPIE Data Average Monthly Citywide Collected Rents as a Share of Average Monthly HCR Legal Registered Rents, 1990-2018

> Percentage of Legal Rent Collected Decreased in 2018



Source: HCR Annual Rent Registrations; NYC Department of Finance, 1990-2018 RPIE Data

of the collected RPIE rents to the HCR rents is an indicator that reflects preferential rents and the prevalence of 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 that account for vacancies or nonpayment of rent. By contrast, HCR data consists of legal rents registered annually with the agency. Because HCR rent data does not reflect preferential rents, nor include vacancy and collection losses, these rents have always been higher than RPIE rent collection data. Furthermore, RPIE information includes unregulated apartments in buildings containing rent stabilized units. Also, the RPIE information reflects rents collected over a 12-month period while HCR data reflects rents registered on April 1, 2018.

From 2017 to 2018, the gap between annual RPIE and HCR average rents was 28.4%, as indicated by the average RPIE rent of \$1,397 and HCRs average stabilized rent of \$1,950. This is a half point increase from the 27.9% gap the previous year, and

is the largest gap since the RGB began measuring the data, continuing a trend from 2002, where the gap has grown in most years. (See graph on this page for a historical comparison of RPIE and HCR rent differences.)

At the borough level, the gap between collected and legal rent varies significantly. In 2018, Bronx property owners collected an average rent (\$1,044) that was 24.3% below HCR's average legal rent for the borough (\$1,378), while owners in the other boroughs collected average rents that were 26.8% lower in Queens; 28.2% lower in Brooklyn; 29.4% lower in Manhattan; and 35.0% lower in Staten Island. 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.<sup>3</sup>

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 was higher than the renewal lease increases allowed by the RGB's guidelines for an eighth consecutive year. RPIE rent growth, up 3.7%, was greater than the increase in the RGB rent index, which was up 2.4%, between 2017 and 2018 (adjusted to a calendar year).<sup>4</sup>

Prior to passage of the *Housing Stability & Tenant Protection Act of 2019*, there were several ways in which rents may be raised beyond the RGB's guidelines, including the deregulation of apartment units; raising preferential rents; vacancy allowances; and through individual apartment and building-wide improvements.

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 2018. During that period, HCR adjusted legal rents increased 241.7%;<sup>5</sup> RPIE collected rents increased 211.5%; and the RGB Rent Index increased 180.7% (figures not adjusted for inflation).<sup>6</sup>

#### Rent Comparisons, 1990-2018

#### 2017-18 HCR Legal Rents and RPIE Collected Rents Both Grew Faster Than RGB Rent Index

	RPIE Rent Growth	HCR Rent Growth	RGB Rent Index
	Growth	(Adjusted)§	(Adjusted)Ø
		(Aujusteu)s	(Aujusteu)Ø
1990-91	3.4%	4.1%	4.1%
1991-92	3.5%	3.0%	3.7%
1992-93	3.8%	3.0%	3.1%
1993-94	4.5%	2.4%	2.9%
1994-95	4.3%	3.1%	3.1%
1995-96	4.1%	4.1%	4.5%
1996-97	5.4%	4.6%	5.2%
1997-98	5.5%	3.3%	3.7%
1998-99	5.5%	3.7%	3.8%
1999-00	6.2%	4.4%	4.2%
2000-01	4.9%	5.3%	5.0%
2001-02	4.0%	4.4%	4.5%
2002-03	3.6%	6.9%	4.1%
2003-04‡	-	1.6%	5.5%
2004-05	4.6%	5.8%	4.6%
2005-06	5.6%	7.2%	4.3%
2006-07	6.5%	6.0%	4.2%
2007-08	5.8%	5.9%	4.7%
2008-09	1.4%	5.4%	7.5%
2009-10	0.7%	5.4%	5.2%
2010-11	4.4%	5.7%	3.7%
2011-12	5.0%	5.8%	4.4%
2012-13	4.5%	5.4%	4.1%
2013-14	4.8%	5.1%	4.1%
2014-15	4.4%	4.5%	2.2%
2015-16	3.1%	4.0%	1.6%
2016-17	3.0%	3.9%	1.9%+
2017-18	3.7%	3.7%	2.4%
1990 to			
2018*‡	211.5%	241.7%	180.7%
Ø See endnote 4 ‡ See endnote 6 * Not adjusted fo	✦Figure re	note 5 evised from prior yec	ır

\* Not adjusted for inflation Sources: NYS HCR Annual Rent Registrations;

NYC Department of Finance, 1990-2018 RPIE Data

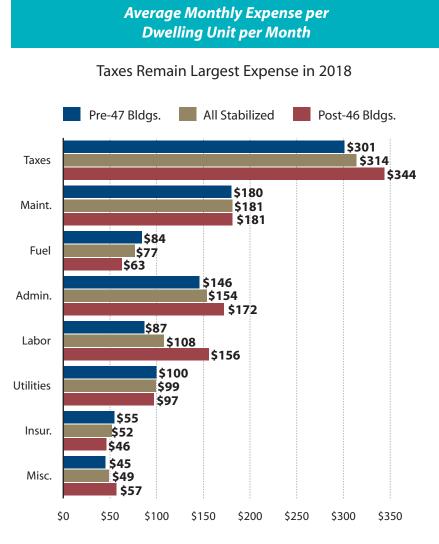
#### **Operating Costs**

Rent stabilized apartment buildings regularly incur several types of expenses. RPIE filings categorize 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 reported are comparatively high because they include various expenses for commercial space.

The average monthly O&M cost for units in stabilized buildings were \$1,034 in 2018. Costs were lower in units in pre-war structures (\$998), and higher among post-war buildings (\$1,116). Geographically, average costs were lowest in Staten Island (\$796); the Bronx (\$797); Brooklyn (\$881); and Queens (\$934); and highest in Manhattan (\$1,473). Within Manhattan, costs for units located in Core Manhattan averaged \$1,745 a month, while the costs in Upper Manhattan were \$1,125. 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 2018. The graph shows that taxes make up the largest expense, averaging 30.4% of all costs among rent stabilized buildings.

Citywide, 2018 median O&M costs were \$923. By borough, Manhattan had the highest median costs, at \$1,265 (\$1,433 in Core Manhattan and \$1,005 in Upper Manhattan); followed by Queens at \$881; Brooklyn at \$824; the Bronx at \$780; and Staten Island at \$772. Median monthly expenses in the City, excluding Core Manhattan, was \$846. (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



Source: NYC Department of Finance, 2018 RPIE Data

were administrative or maintenance costs, 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 2018 RPIE O&M cost (\$1,034) by the results of the 1992 audit results in an average monthly O&M cost of \$949.<sup>7</sup>

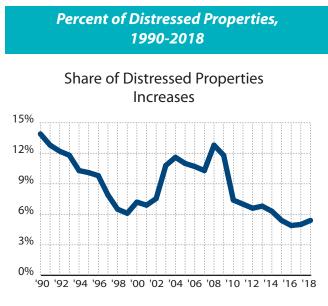
Just as buildings without commercial space typically generate less revenue than stabilized with properties commercial space, operating expenses in these buildings tend to be lower on average than in buildings with a mixture of uses. In 2018, unaudited average O&M costs for "residential-only" buildings were \$942 per month and average audit-adjusted O&M costs for these buildings were \$865 per month. Thus, residential-only buildings have average O&M costs that are 8.9% 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 that filed RPIEs for 2018, 814 buildings, equal to 5.4% of the total number of rent stabilized buildings, had reported O&M costs that exceeded gross income, four-tenths of a point higher than the prior year. Since 1990, when 13.9% of stabilized properties were considered

distressed, the proportion of distressed buildings declined each year until 1999, reaching 6.1%. From 1999 until 2004, the proportion generally increased, but then declined ten times over twelve years, reaching in 2016 its lowest level in the 29-year history of this study. This year's 5.4% figure equals the third lowest ever recorded -- the same percentage as in 2015. (see graph on the next page).

Most distressed stabilized properties (59%) are mid-sized buildings, containing 20 to 99 units. In addition, the vast majority (92%) are pre-war buildings. By borough, 56% of the buildings are in



Source: NYC Department of Finance, 1990-2018 RPIE Data

Manhattan; while the remaining buildings are in the Bronx (19%); Brooklyn (16%); Queens (9%) and Staten Island (less than 1%). (See Appendix 7 for a complete breakdown of distressed buildings by borough, building size and building age.)

#### **Net Operating Income**

Revenues exceed operating costs in nearly all stabilized 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, income 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 rent stabilized buildings generated \$535 of net income per month in 2018, with units in post-war buildings earning more (\$632 per month) than those in pre-war buildings (\$492 per month). Average monthly NOI is greater among stabilized properties in Manhattan (\$801) than for those in the other boroughs: \$481 in Queens; \$467 in Brooklyn; \$400 in Staten Island; and \$362 per unit per month in the Bronx. There was a notable difference when looking at NOI on a subborough level in Manhattan. Core Manhattan properties earned on average \$1,028 per unit per month in NOI, twice as much as properties in Upper Manhattan, which earned an average NOI of \$511. The monthly NOI average calculated Citywide, excluding Core Manhattan, was \$440. Looking at the NOI using audit-adjusted expense figures, the Citywide NOI in 2018 was \$619. (See Endnote 7.)

Average monthly unaudited NOI in "residentialonly" properties Citywide was \$476 per unit in 2018, 10.9% lower than the average for all stabilized buildings.

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; income tax and 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 \$535 per unit by the typical size of buildings in this year's analysis (an average of 45.0 units) yields an estimated average annual NOI of \$288,918 in 2018. Excluding Core Manhattan, the monthly NOI of \$440 per unit multiplied by the typical size of buildings in this year's analysis outside Core Manhattan (an average of 45.9 units) yields an estimated average annual NOI of \$242,605.

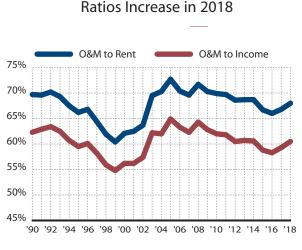
#### **Operating Cost Ratios**

Another way to evaluate the financial conditions of New York City's rent stabilized housing 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 2018, the proportion of total income and rent collections spent on audit-adjusted operating costs has fluctuated. The audit-adjusted Cost-to-Income ratio in 2018 was 60.5%, a 1.2 percentage point increase from the prior year's 59.3%. This means that on average, owners of rent stabilized properties spent roughly 60½ cents out of every dollar of revenue on operating and maintenance costs in 2018. Looking at unaudited expenses, the cost-to-income ratio in 2018 was 65.9, a 1.3 percentage point increase from the prior year. The unaudited median cost-to-income ratio was 66% in 2018.

Examining the ratio of costs to rent collections, audit-adjusted operating costs in 2018 were 68.0% of revenues from rent, up 1.2 percentage points from the prior year. (See Endnote 7.) Using unaudited expenses, the cost-to-rent ratio in 2018 was 74.0%, a 1.3 percentage point increase. Looking at the unaudited median cost-to-rent ratio, it was 72% in 2018.

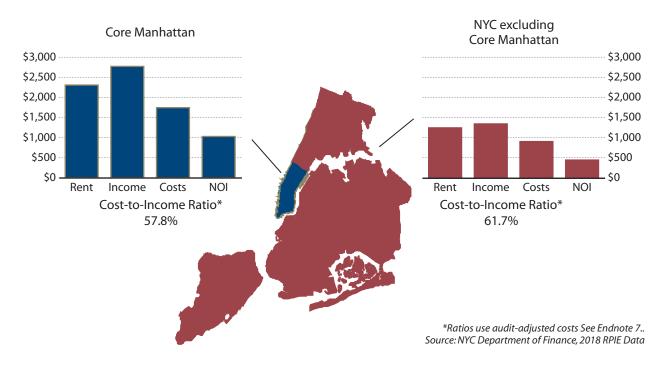
Rents, income, and costs per unit were on average highest in Core Manhattan in 2018 (see map and graphs on this page). Excluding Core Ratios of Citywide Average Monthly Audit-Adjusted O&M Costs to Average Monthly Gross Income and Rent 1990-2018

Cost-to-Income and Cost-to-Rent



Source: NYC Dept. of Finance, 1990-2018 RPIE Data

Average Monthly Rent, Income, Operating Costs and Net Operating Income per Dwelling Unit and Cost-to-Income Ratios, Core Manhattan and the Rest of the City, 2018



#### Cost-to-Income Ratio Remains Lower in Core Manhattan

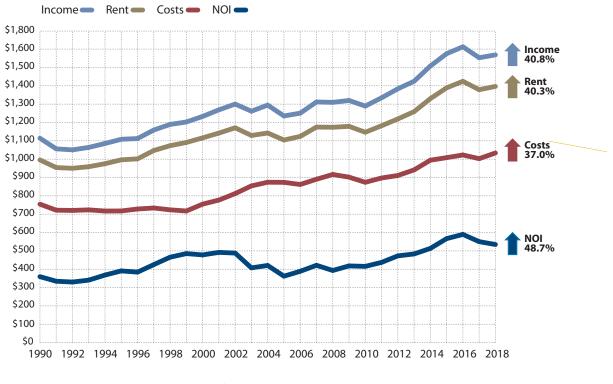
Manhattan, the average revenue and costs figures are lower, and have different expense to revenue ratios. The audit-adjusted Cost-to-Income Ratio for the rest of the City was 61.7%, higher than the Costto-Income Ratio for stabilized buildings in Manhattan's Core (57.8%). (See Endnote 7.) These figures indicate that on average, owners of stabilized properties outside of Core Manhattan spend about 3.9 cents more of every dollar of revenue on expenses, as compared to their counterparts in Core Manhattan.

In an analysis of the distribution of operating costs in relation to total income in buildings by decile, it may be useful to examine the percentage of buildings with cost-to-income ratios at or below certain levels. The Department of Finance calculated decile levels, revealing that half of all rent stabilized buildings Citywide have unaudited cost-to-income ratios of 0.66 or less. This means that half the building owners spent no more than 66 cents out of every dollar of revenue on operating and maintenance costs in 2018. Examining the 30% decile level , three out of every ten building owners Citywide pay no more than 59 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 74 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



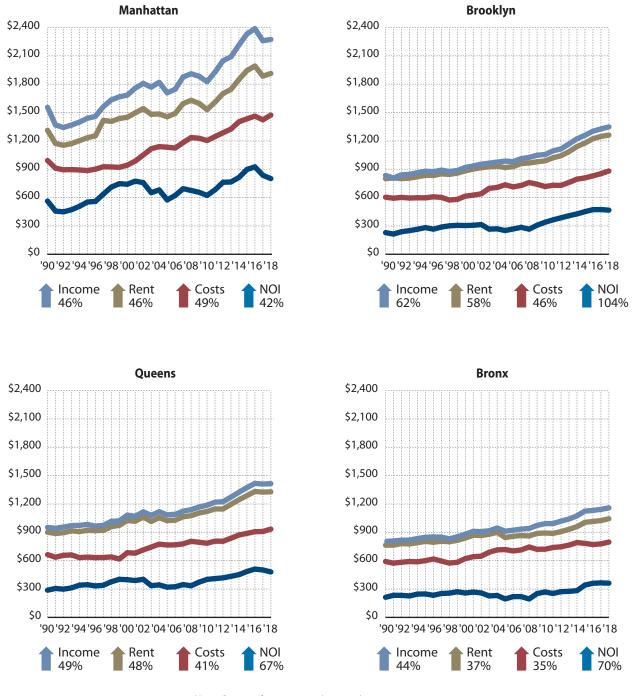


Inflation-Adjusted Net Operating Income Up 48.7% Since 1990 (Average Monthly Income, Rent, Operating Costs and NOI per Dwelling Unit in Constant 2018 Dollars)

> Note: Percent changes are point-to-point measurements. Sources: NYC Rent Guidelines Board Income and Expense Studies, 1992-2020; NYC Department of Finance, 1990-2018 RPIE Data

#### Income, Rent, Costs and NOI After Inflation per Borough, 1990-2018

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 2018 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, 1992-2020; NYC Department of Finance, 1990-2018 RPIE Data 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 2018 dollars) and comparing different base years to the latest data available is a useful way to assess the health of the stabilized housing stock 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 2018, after adjusting for inflation, NOI has increased 48.7% (see graph on page 11). This indicates that revenues have outpaced expenses to the extent that average monthly NOI was worth 48.7% more in 2018 than it was in 1990, after adjusting for inflation.<sup>8</sup>

Another way to look at how rent, income and costs, as well as NOI, have changed after accounting for inflation is to graph inflation-adjusted monthly figures for each of the components measured in the I&E studies. Between 1990 and 2018, inflation-adjusted rent increased a cumulative 40.3%, income by 40.8%, and costs by 37.0%, resulting in the increase in NOI, after inflation, of 48.7%.

Examining the ratio of NOI to income, since 1990, it has varied. From 1990-96, the ratio of NOI/income averaged 33%; from 1997-2002, 39%; from 2003-2009, 31%; and since 2010, the average ratio of NOI/income has been about 34%. This means that on average, over the past nine years, 34 cents of every dollar earned is net operating income for the owner.

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 2018, all boroughs saw sizable increases in their net income, with Brooklyn seeing the largest increase, with NOI increasing 104%; followed by the Bronx, up 70%; Queens, up 67%; and Manhattan, up 42% (see graphs on previous page).

### Longitudinal Study

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 13,658 rent stabilized buildings from 2017 to 2018.

#### **Rents and Income**

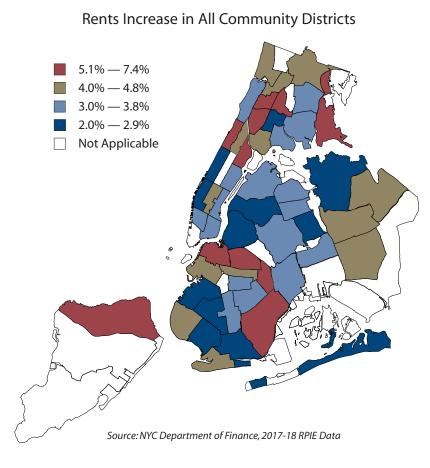
Rent collections increase for a number of reasons, including increases allowed under RGB guidelines; termination of preferential rents upon vacancy; combining apartments; individual apartments improvements (IAIs); and building-wide major capital improvements (MCIs). In addition, for the period of this study, vacancy increases and termination of preferential rents upon lease renewal were still permitted.

Average rent collections in stabilized buildings grew by 3.7% in 2018. Rent collections in pre-war buildings grew at a higher rate, up 4.0%, than in post-war buildings, which rose by 3.2%. Rent collections increased the most among mid-sized, 20-99 unit buildings, up 3.8%; while smaller, 11-19 unit and large, 100+ unit buildings, each grew 3.6%. Examining rent collections by borough, Staten Island saw the largest increase, up 6.0%; followed by the Bronx, up 4.4%; Brooklyn, up 3.8%; Manhattan, up 3.5%; and Queens, up 3.1%. Within Manhattan, Upper Manhattan rents grew at a faster rate, up 3.9%, than the 3.3% increase in rents in Core Manhattan. Rent collections in the City, excluding Core Manhattan, rose 3.9%. The growth in median rent Citywide was 4.1%.

Looking at rent collections throughout New York City, every Community District saw increases in average rent from 2017 to 2018.<sup>9</sup>

At the neighborhood level, the greatest rent growth was found in two Brooklyn neighborhoods, Bushwick and Brooklyn Heights/Fort Greene, where rent grew in each by 7.4%. The next highest rent growth was also in Brooklyn, rising 7.2% in Bedford Stuyvesant; followed by E.Tremont/Belmont, in the Bronx, up 6.2%; the North Shore of Staten Island, up 6.1%; and Morningside/Hamilton Heights in

#### Change in Rent by Community District, 2017-18



Manhattan, up 5.6%. The largest increase in Queens was in Hillcrest/Fresh Meadows, up 4.8%. By contrast, the neighborhood with the smallest increase in rent was the Upper West Side of Manhattan, up 2.0%. See map on this page and Appendix 13 for a breakdown of changes in rent collections by Community District throughout NYC.

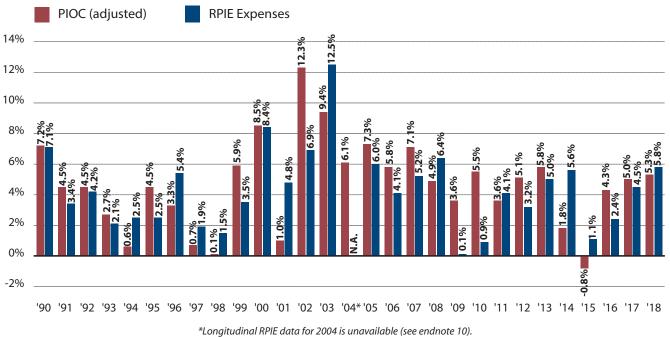
The average total income collected in rent stabilized buildings, comprising apartment rents, commercial rents and sales of services, rose 3.6% from 2017 to 2018. Revenues grew faster in pre-war buildings, up 3.8%, compared to 3.1% among postwar buildings. The borough seeing the highest growth in income was Staten Island, up 5.8%; followed by the Bronx, up 4.1%; Brooklyn, up 4.0%; Queens, up 3.3%; and Manhattan, up 3.1%. Within Manhattan, Upper Manhattan income rose 3.7%; while Core Manhattan income grew 2.9%. Total income in the City, excluding Core Manhattan, grew 3.8%. The median growth in income Citywide was 3.9%.

#### **Operating Costs**

Citywide, average expenses in stabilized buildings increased 5.8% from 2017 to 2018. Pre-war buildings rose at a greater amount, up 6.2%, while post-war building costs rose 5.1%. However, the change in operating costs varied by borough. Costs grew the most in Manhattan, up 6.1%; followed by the Bronx and Staten Island, both up 5.8%; Brooklyn, up 5.6%; and Queens, up 5.5%. Within Manhattan, Upper Manhattan costs rose more, by 7.2%; while Core Manhattan costs grew by 5.6%. Operating costs in the City, excluding Core Manhattan, rose 5.9%. Median Citywide expenses rose 6.4%. For a detailed breakdown of the changes in rent, income and costs by building size, age and location, 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), each provide a form of independent verification for the expense findings in the other. However, comparison of I&E and PIOC data is somewhat problematic 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 March to March basis, while most RPIE statements filed by landlords are based Change in Operating & Maintenance Costs, RPIE and the PIOC, 1990 to 2018



#### In 2018, Owner-Reported RPIE Expenses Grew More Than PIOC Costs

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 5.3% from 2017 to 2018, the same period as the 5.8% increase in I&E costs, half of a percentage point difference. (See graph on this page.)

From 1990-91 to 2017-18, cumulative growth in owners' costs as measured by the two indices varied. Overall nominal costs measured in the PIOC increased at a greater rate, 227.1%, compared to RPIE data, which grew 202.7% over this period.<sup>10</sup>

#### **Operating Cost Ratios**

Between 2017 and 2018, the proportion of gross income spent on audit-adjusted expenses (the O&M Cost-to-Income ratio) increased, rising by 1.3 percentage points. The proportion of rental income used for audit-adjusted expenses (the O&M Cost-to-Rent ratio) likewise rose, increasing by 1.4 percentage points. (See Endnote 7.) Meanwhile, utilizing unaudited expense data, the unaudited cost-to-income ratio rose 1.4 percentage points from 2017 to 2018, and the unaudited cost-to-rent ratio rose 1.5 percentage points.

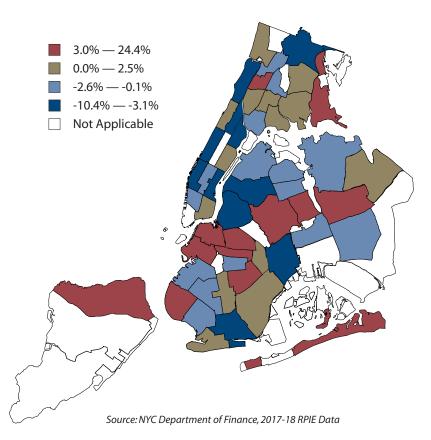
#### **Net Operating Income**

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. Since actual average collected income grew at a lower rate than average operating costs, Citywide net operating income in rent stabilized buildings declined for the first time since the 2002-03 period, falling 0.6% between 2017 and 2018. The decline was preceded by thirteen consecutive years of NOI increases. Since 1990-91,

<sup>\*</sup>Longitudinal RPIE data for 2004 is unavailable (see endnote 10). Sources: NYC Department of Finance, 1990-2018 RPIE Data; RGB Price Index of Costs (PIOC) 1990-2018

#### Change in NOI by Community District, 2017-18

Net Operating Income Grows in Half the Community Districts and Declined in Remaining Half



when this study first calculated the change in NOI, it has declined just three times: two consecutive periods (2001-02 and 2002-03) and the most recent period (2017-18). Citywide, NOI in pre-war buildings fell 0.7%, while newer, post-war buildings fell by 0.3%.

The average change in NOI from 2017 to 2018 differed throughout the City. NOI increased in three boroughs but declined in two. The largest increase was on Staten Island, where it rose 5.8%; followed by Brooklyn, up 1.0% and the Bronx, up 0.6%. Meanwhile, NOI declined 0.5% in Queens and 1.9% in Manhattan. Within Manhattan, NOI declined more in Upper Manhattan, falling 3.3%, and fell 1.4% in Core Manhattan. Monthly NOI in the City, excluding Core Manhattan, fell 0.2%. See Appendix 12 for a breakdown of NOI by borough, building age and building size.

At the Community District level, NOI rose in half of the City's neighborhoods. The greatest growth was found in Brooklyn, with Bushwick up 24.4% and Bedford Stuyvesant up 15.1%. The North Shore of Staten Island saw the next largest increase in NOI, up 8.1%. The greatest increase in the Bronx was in Throgs Neck/Co-op City, up 5.4%; in Queens, it was in the Rockaways, up 4.7%; and in Manhattan, Morningside/Hamilton Heights was up 2.5%.

Meanwhile, the remaining half of the City's neighborhoods experienced a decline in NOI. The largest decrease was on the Upper West Side of Manhattan, falling 10.4%; followed by East New York/ Starett City in Brooklyn, down 9.4% and Central Harlem in Manhattan, down 6.3%. The largest decline in Oueens was in Sunnyside/ Woodside, down 3.8%; and the biggest decline in the Bronx was in Williamsbridge/Baychester, down

3.2%. The map on this page and Appendix 13 shows how NOI varied in each neighborhood throughout NYC. (See Endnote 9.)

#### **Summary**

This study, published in April 2020, focuses on data from 2018 and prior years. Due to the as-yetunknown full impact of the COVID-19 virus, it does not reflect the current economic condition of the New York City rental market and should not be interpreted as such. Future editions of this study will illustrate some of the hardships that our fellow New Yorkers may be experiencing now and in the future.

RPIE filings, from over 15,000 rent stabilized

Changes in Average Monthly Rent, Income, Operating Costs and Net Operating Income per Dwelling Unit, 1990-2018									
Net Op	erating Income (NOI	) Declines in 2017-1	8, After Increasing for	r 13 Years					
	Avg. Rent Growth	Avg. Income Growth	Avg. Cost Growth	Avg. NOI 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%					
Note: Longitudinal data from 2	2003-04 is unavailable. Source:	NYC Department of Finance, 19	990-2018 RPIE Data						

buildings containing close to 676,000 units in the main RPIE study, and from almost 13,700 buildings containing almost 626,000 units in the longitudinal study, were analyzed in this year's Income and Expense Study. Citywide, average rent grew by 3.7%; revenue collections increased 3.6%; and expenses rose by 5.8%. Because expenses increased more than income, NOI Citywide decreased by 0.6%, the first Citywide NOI decline since the 2003-04 RPIE period. It is also the third time NOI has declined in the 27 years it has been calculated by this study. (See table on previous page for historical data.) Also, the proportion of distressed properties Citywide rose 0.4 percentage points, to 5.4%. Finally, the audit-adjusted cost-toincome ratio was 60.5%, an increase of 1.2 percentage points from the previous year. (See Endnote 7.)

### Methodology

The information in this report was generated by analyzing data sets derived from RPIE forms filed with the NYC Department of Finance in 2019 by owners of apartment buildings with primarily eleven or more dwelling units. The data in these forms, which reflects financial conditions in stabilized buildings for the year 2018, was made available to the RGB beginning in February 2020 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 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, and were not adjusted by the 2017 HVS and are considered to be unweighted.

Two types of summarized data, primary RPIE data and longitudinal data, were obtained for stabilized buildings. The primary RPIE data, which

provides a "snapshot" or "moment-in-time" view, comes from properties that filed RPIE forms in 2018, or alternatively, TCIE (Tax Commission Income & Expense) forms.<sup>11</sup> Data from the forms were used to compute average and median rents, operating costs, etc., for 2018. Longitudinal data, which provide a direct comparison of identical elements over time, encompass properties that filed RPIE/TCIE forms for the years 2017 and 2018. 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 2018, while the longitudinal data section measures changes in conditions that occurred from 2017 to 2018.

This year, 15,012 buildings containing rent stabilized units were analyzed in the main RPIE study and 13,658 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 2019 RPIE or TCIE statements (or 2018 and 2019 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 2019; for the longitudinal study, owners who did not file an RPIE or TCIE form in both 2018 and 2019;
- 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**

- 1. 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 30.6% of all 2018 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.
- 4. 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.
- 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.
- 6. 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, 211.5%, 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 196.0% and the HCR rent increased 247.2%.
- Despite the length of time since the 1992 audit, the RGB feels it is still useful to report audit-adjusted expenses. 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.
- 9. Six 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 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.
- 11. 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 2018 per Apartment per Month by Building Size and Location, Structures Built Before 1947

	Taxes	Labor	<u>Fuel</u>	Water/Sewer	Light & Power	Maint.	Admin.	Insurance	Misc.	Total
Citywide	<b>\$301</b>	<b>\$87</b>	<b>\$84</b>	<b>\$74</b>	<b>\$26</b>	<b>\$180</b>	<b>\$146</b>	<b>\$55</b>	<b>\$45</b>	<b>\$998</b>
11-19 units	\$381	\$85	\$92	\$73	\$29	\$198	\$163	\$59	\$55	\$1,136
20-99 units	\$268	\$74	\$84	\$75	\$25	\$175	\$137	\$55	\$44	\$938
100+ units	\$484	\$212	\$65	\$64	\$34	\$200	\$200	\$47	\$37	\$1,343
Bronx	\$164	\$72	\$94	\$82	\$27	\$162	\$113	\$60	\$27	\$801
11-19 units	\$177	\$83	\$116	\$83	\$31	\$181	\$111	\$62	\$31	\$877
20-99 units	\$164	\$70	\$93	\$82	\$27	\$161	\$112	\$60	\$27	\$796
100+ units	\$159	\$91	\$78	\$84	\$23	\$179	\$131	\$57	\$18	\$819
Brooklyn	\$244	\$66	\$70	\$75	\$20	\$166	\$124	\$52	\$41	\$858
11-19 units	\$270	\$67	\$78	\$71	\$21	\$182	\$132	\$53	\$42	\$917
20-99 units	\$235	\$62	\$70	\$76	\$19	\$162	\$122	\$52	\$41	\$840
100+ units	\$288	\$102	\$56	\$72	\$23	\$170	\$138	\$49	\$31	\$928
Manhattan	\$493	\$124	\$86	\$69	\$33	\$217	\$210	\$54	\$70	\$1,357
11-19 units	\$565	\$107	\$95	\$74	\$37	\$228	\$233	\$65	\$81	\$1,486
20-99 units	\$433	\$92	\$88	\$70	\$29	\$210	\$193	\$53	\$73	\$1,240
100+ units	\$715	\$322	\$66	\$54	\$48	\$235	\$272	\$44	\$37	\$1,793
Queens	\$284	\$78	\$82	\$66	\$21	\$164	\$111	\$47	\$36	\$891
11-19 units	\$267	\$67	\$96	\$66	\$21	\$160	\$84	\$50	\$29	\$839
20-99 units	\$285	\$73	\$81	\$66	\$22	\$167	\$116	\$47	\$34	\$891
100+ units	\$312	\$135	\$64	\$66	\$15	\$152	\$124	\$46	\$60	\$973
Core Man	\$687	\$152	\$75	\$58	\$35	\$228	\$246	\$53	\$71	\$1,606
11-19 units	\$690	\$108	\$88	\$71	\$36	\$246	\$247	\$65	\$74	\$1,625
20-99 units	\$637	\$97	\$74	\$55	\$28	\$213	\$226	\$51	\$81	\$1,463
100+ units	\$815	\$360	\$64	\$51	\$53	\$248	\$297	\$44	\$36	\$1,969
Upper Man	\$305	\$96	\$97	\$78	\$30	\$205	\$175	\$55	\$70	\$1,112
11-19 units	\$325	\$103	\$107	\$82	\$40	\$192	\$203	\$64	\$94	\$1,210
20-99 units	\$298	\$89	\$97	\$79	\$29	\$208	\$170	\$54	\$68	\$1,093
100+ units	\$369	\$189	\$74	\$64	\$31	\$187	\$181	\$46	\$40	\$1,180
City w/o Core	\$232	\$75	\$85	\$77	\$25	\$172	\$128	\$55	\$40	\$888
11-19 units	\$265	\$77	\$93	\$74	\$26	\$179	\$131	\$56	\$48	\$949
20-99 units	\$223	\$72	\$86	\$78	\$24	\$171	\$126	\$55	\$39	\$874
100+ units	\$284	\$123	\$65	\$71	\$22	\$170	\$140	\$49	\$37	\$962

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 is 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 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.

2. Average Operating & Maintenance Cost in 2018 per Apartment per Mont	h by
Building Size and Location, Structures Built After 1946	

	Taxes	Labor	Fuel	Water/Sewer	Light & Power	Maint.	Admin.	Insurance	Misc.	<u>Total</u>
Citywide	<b>\$344</b>	<b>\$156</b>	<b>\$63</b>	<b>\$63</b>	<b>\$34</b>	<b>\$181</b>	<b>\$172</b>	<b>\$46</b>	<b>\$57</b>	<b>\$1,116</b>
11-19 units	\$284	\$85	\$66	\$64	\$39	\$167	\$147	\$57	\$37	\$946
20-99 units	\$259	\$96	\$64	\$65	\$30	\$170	\$142	\$47	\$49	\$921
100+ units	\$441	\$228	\$61	\$60	\$38	\$194	\$206	\$42	\$68	\$1,338
Bronx	\$146	\$93	\$74	\$73	\$42	\$151	\$125	\$47	\$31	\$782
11-19 units	-	-	-	-	-	-	-	-	-	-
20-99 units	\$154	\$81	\$79	\$72	\$41	\$147	\$116	\$50	\$32	\$773
100+ units	\$135	\$114	\$64	\$73	\$44	\$151	\$140	\$41	\$28	\$792
Brooklyn	\$248	\$111	\$54	\$64	\$29	\$180	\$146	\$48	\$55	\$935
11-19 units	-	-	-	-	-	-	-	-	-	-
20-99 units	\$250	\$93	\$54	\$65	\$25	\$185	\$150	\$47	\$50	\$918
100+ units	\$242	\$157	\$48	\$64	\$36	\$166	\$134	\$46	\$59	\$952
Manhattan	\$708	\$313	\$68	\$51	\$44	\$235	\$292	\$45	\$74	\$1,830
11-19 units	\$665	\$103	\$82	\$61	\$45	\$292	\$307	\$62	\$10	\$1,628
20-99 units	\$513	\$137	\$67	\$54	\$36	\$205	\$246	\$49	\$65	\$1,372
100+ units	\$756	\$358	\$68	\$51	\$45	\$241	\$302	\$44	\$77	\$1,943
Queens	\$291	\$123	\$60	\$64	\$28	\$162	\$138	\$42	\$63	\$970
11-19 units	\$304	\$89	\$57	\$63	\$41	\$138	\$133	\$49	\$14	\$887
20-99 units	\$280	\$101	\$63	\$65	\$26	\$164	\$124	\$44	\$57	\$924
100+ units	\$299	\$156	\$56	\$64	\$26	\$165	\$155	\$38	\$84	\$1,042
St. Island	\$207	\$95	\$55	\$51	\$20	\$159	\$112	\$43	\$34	\$775
11-19 units	-	-	-	-	-	-	-	-	-	-
20-99 units	\$182	\$63	\$53	\$51	\$21	\$138	\$106	\$46	\$32	\$694
100+ units	-	-	-	-	-	-	-	-	-	-
Core Man	\$821	\$351	\$68	\$50	\$46	\$241	\$312	\$47	\$87	\$2,022
11-19 units	-	-	-	-	-	-	-	-	-	-
20-99 units	\$678	\$162	\$63	\$47	\$34	\$215	\$264	\$48	\$73	\$1,584
100+ units	\$847	\$386	\$69	\$50	\$48	\$245	\$320	\$46	\$90	\$2,102
Upper Man	\$343	\$190	\$67	\$57	\$36	\$214	\$227	\$40	\$34	\$1,208
11-19 units	-	-	-	-	-	-	-	-	-	-
20-99 units	\$288	\$103	\$72	\$62	\$39	\$190	\$222	\$50	\$54	\$1,078
100+ units	-	-	-	-	-	-	-	-	-	-
City w/o Core	\$246	\$116	\$61	\$65	\$32	\$168	\$142	\$45	\$51	\$927
11-19 units	\$274	\$85	\$65	\$64	\$39	\$164	\$142	\$56	\$38	\$928
20-99 units	\$236	\$92	\$64	\$66	\$29	\$168	\$135	\$47	\$47	\$884
100+ units	\$256	\$156	\$57	\$64	\$33	\$169	\$154	\$40	\$58	\$988

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 is 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, Brooklyn, Staten Island, Core Manhattan and Upper Manhattan; as well as 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 2018 per Apartment per Month by Building Size and Location

	Post-46				Pre-47			All		
	<u>Rent</u>	Income	<u>Costs</u>	Rent	Income	<u>Costs</u>	Rent	Income	<u>Costs</u>	
Citywide	<b>\$1,563</b>	<b>\$1,748</b>	<b>\$1,116</b>	<b>\$1,323</b>	<b>\$1,489</b>	<b>\$998</b>	<b>\$1,397</b>	<b>\$1,568</b>	<b>\$1,034</b>	
11-19 units	\$1,451	\$1,636	\$946	\$1,412	\$1,693	\$1,136	\$1,418	\$1,685	\$1,109	
20-99 units	\$1,301	\$1,419	\$921	\$1,257	\$1,394	\$938	\$1,266	\$1,399	\$934	
100+ units	\$1,852	\$2,106	\$1,338	\$1,806	\$2,066	\$1,343	\$1,838	\$2,094	\$1,340	
Bronx	\$1,109	\$1,211	\$782	\$1,027	\$1,145	\$801	\$1,044	\$1,159	\$797	
11-19 units	-	-	-	\$1,002	\$1,177	\$877	\$1,003	\$1,178	\$875	
20-99 units	\$1,087	\$1,177	\$773	\$1,025	\$1,141	\$796	\$1,031	\$1,145	\$794	
100+ units	\$1,149	\$1,268	\$792	\$1,109	\$1,212	\$819	\$1,128	\$1,238	\$806	
Brooklyn	\$1,344	\$1,466	\$935	\$1,226	\$1,299	\$858	\$1,261	\$1,348	\$881	
11-19 units	-	-	-	\$1,272	\$1,374	\$917	\$1,285	\$1,389	\$921	
20-99 units	\$1,312	\$1,425	\$918	\$1,204	\$1,268	\$840	\$1,215	\$1,285	\$848	
100+ units	\$1,344	\$1,467	\$952	\$1,364	\$1,455	\$928	\$1,352	\$1,462	\$943	
Manhattan	\$2,509	\$2,948	\$1,830	\$1,720	\$2,055	\$1,357	\$1,913	\$2,274	\$1,473	
11-19 units	\$1,714	\$2,380	\$1,628	\$1,715	\$2,243	\$1,486	\$1,715	\$2,244	\$1,487	
20-99 units	\$1,848	\$2,164	\$1,372	\$1,607	\$1,874	\$1,240	\$1,627	\$1,898	\$1,251	
100+ units	\$2,676	\$3,142	\$1,943	\$2,316	\$2,753	\$1,793	\$2,554	\$3,010	\$1,892	
Queens	\$1,362	\$1,471	\$970	\$1,288	\$1,347	\$891	\$1,329	\$1,415	\$934	
11-19 units	\$1,382	\$1,538	\$887	\$1,193	\$1,254	\$839	\$1,214	\$1,285	\$844	
20-99 units	\$1,310	\$1,402	\$924	\$1,292	\$1,346	\$891	\$1,297	\$1,361	\$900	
100+ units	\$1,418	\$1,535	\$1,042	\$1,425	\$1,511	\$973	\$1,420	\$1,529	\$1,026	
St. Island 11-19 units 20-99 units 100+ units	\$1,106 - \$1,060 -	\$1,193 - \$1,121 -	\$775 - \$694 -	- - -	- - -	- - -	\$1,115 - \$1,089 -	\$1,196 - \$1,149 -	\$796 - \$748 -	
Core Man	\$2,764	\$3,241	\$2,022	\$2,080	\$2,539	\$1,606	\$2,308	\$2,773	\$1,745	
11-19 units	-	-	-	\$1,864	\$2,503	\$1,625	\$1,861	\$2,501	\$1,625	
20-99 units	\$2,174	\$2,523	\$1,584	\$2,004	\$2,369	\$1,463	\$2,016	\$2,380	\$1,471	
100+ units	\$2,876	\$3,374	\$2,102	\$2,528	\$3,032	\$1,969	\$2,743	\$3,244	\$2,051	
Upper Man	\$1,686	\$1,998	\$1,208	\$1,366	\$1,581	\$1,112	\$1,408	\$1,636	\$1,125	
11-19 units	-	-	-	\$1,421	\$1,726	\$1,210	\$1,424	\$1,722	\$1,205	
20-99 units	\$1,397	\$1,668	\$1,078	\$1,344	\$1,547	\$1,093	\$1,345	\$1,550	\$1,093	
100+ units	-	-	-	\$1,574	\$1,774	\$1,180	\$1,670	\$1,919	\$1,215	
City w/o Core	\$1,313	\$1,437	\$927	\$1,211	\$1,298	\$888	\$1,242	\$1,340	\$900	
11-19 units	\$1,444	\$1,616	\$928	\$1,190	\$1,273	\$949	\$1,237	\$1,337	\$945	
20-99 units	\$1,253	\$1,358	\$884	\$1,194	\$1,273	\$874	\$1,207	\$1,292	\$877	
100+ units	\$1,381	\$1,524	\$988	\$1,352	\$1,455	\$962	\$1,373	\$1,505	\$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, Brooklyn, Staten Island, Core Manhattan and Upper Manhattan; as well as 100+ unit buildings in Upper Manhattan and Staten Island, was too small to calculate reliable statistics. In addition, the number of Pre-47 rent stabilized buildings of all size groupings 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.

#### 4. Median Rent, Income and Costs in 2018 per Apartment per Month by Building Size and Location

		Post-46			Pre-47			All	
	<u>Rent</u>	Income	<u>Costs</u>	Rent	Income	<u>Costs</u>	Rent	Income	<u>Costs</u>
<b>Citywide</b>	<b>\$1,331</b>	<b>\$1,420</b>	<b>\$946</b>	<b>\$1,247</b>	<b>\$1,349</b>	<b>\$920</b>	<b>\$1,260</b>	<b>\$1,359</b>	<b>\$923</b>
11-19 units	\$1,364	\$1,439	\$926	\$1,375	\$1,555	\$1,082	\$1,374	\$1,548	\$1,074
20-99 units	\$1,258	\$1,337	\$886	\$1,211	\$1,295	\$884	\$1,216	\$1,300	\$884
100+ units	\$1,476	\$1,595	\$1,114	\$1,400	\$1,478	\$974	\$1,445	\$1,563	\$1,052
Bronx	\$1,094	\$1,143	\$752	\$1,038	\$1,131	\$785	\$1,043	\$1,131	\$780
11-19 units	-	-	-	\$998	\$1,144	\$835	\$999	\$1,140	\$835
20-99 units	\$1,083	\$1,129	\$752	\$1,039	\$1,124	\$778	\$1,043	\$1,125	\$775
100+ units	\$1,140	\$1,270	\$699	\$1,133	\$1,241	\$823	\$1,137	\$1,248	\$795
Brooklyn	\$1,289	\$1,373	\$897	\$1,168	\$1,222	\$815	\$1,180	\$1,238	\$824
11-19 units	-	-	-	\$1,194	\$1,260	\$857	\$1,199	\$1,268	\$861
20-99 units	\$1,240	\$1,342	\$873	\$1,158	\$1,206	\$803	\$1,165	\$1,217	\$807
100+ units	\$1,316	\$1,420	\$931	\$1,335	\$1,379	\$866	\$1,325	\$1,408	\$903
Manhattan	\$2,243	\$2,608	\$1,557	\$1,676	\$1,927	\$1,244	\$1,702	\$1,962	\$1,265
11-19 units	\$1,621	\$1,819	\$1,317	\$1,736	\$2,121	\$1,404	\$1,735	\$2,116	\$1,403
20-99 units	\$2,005	\$2,185	\$1,319	\$1,620	\$1,792	\$1,157	\$1,639	\$1,820	\$1,168
100+ units	\$2,943	\$3,333	\$1,955	\$2,230	\$2,655	\$1,715	\$2,696	\$3,090	\$1,895
Queens	\$1,346	\$1,429	\$947	\$1,273	\$1,312	\$858	\$1,295	\$1,347	\$881
11-19 units	\$1,280	\$1,383	\$820	\$1,197	\$1,230	\$808	\$1,206	\$1,242	\$810
20-99 units	\$1,304	\$1,373	\$917	\$1,297	\$1,335	\$867	\$1,300	\$1,345	\$879
100+ units	\$1,418	\$1,542	\$1,037	\$1,431	\$1,489	\$960	\$1,421	\$1,524	\$1,000
St. Island 11-19 units 20-99 units 100+ units	\$1,067 - \$1,038 -	\$1,186 - \$1,067 -	\$748 - \$693 -		- - -	- - -	\$1,091 - \$1,087 -	\$1,179 - \$1,130 -	\$772 - \$744 -
Core Man	\$2,491	\$2,909	\$1,731	\$1,929	\$2,241	\$1,406	\$1,960	\$2,287	\$1,433
11-19 units	-	-	-	\$1,839	\$2,293	\$1,482	\$1,835	\$2,289	\$1,482
20-99 units	\$2,175	\$2,363	\$1,412	\$1,967	\$2,185	\$1,333	\$1,985	\$2,198	\$1,338
100+ units	\$3,041	\$3,402	\$2,043	\$2,514	\$2,993	\$1,953	\$2,852	\$3,297	\$2,022
Upper Man	\$1,479	\$1,670	\$1,010	\$1,285	\$1,456	\$1,005	\$1,289	\$1,462	\$1,005
11-19 units	-	-	-	\$1,343	\$1,599	\$1,121	\$1,351	\$1,593	\$1,113
20-99 units	\$1,357	\$1,479	\$907	\$1,272	\$1,416	\$981	\$1,273	\$1,416	\$980
100+ units	-	-	-	\$1,388	\$1,485	\$1,041	\$1,545	\$1,708	\$1,085
City w/o Core	\$1,261	\$1,344	\$886	\$1,150	\$1,232	\$841	\$1,164	\$1,244	\$846
11-19 units	\$1,320	\$1,400	\$885	\$1,171	\$1,270	\$876	\$1,175	\$1,277	\$876
20-99 units	\$1,211	\$1,281	\$850	\$1,142	\$1,219	\$830	\$1,149	\$1,225	\$832
100+ units	\$1,352	\$1,448	\$973	\$1,287	\$1,376	\$877	\$1,328	\$1,413	\$939

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, Brooklyn, Staten Island, Core Manhattan and Upper Manhattan; as well as 100+ unit buildings in Upper Manhattan and Staten Island, was too small to calculate reliable statistics. In addition, the number of Pre-47 rent stabilized buildings of all size groupings 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 2018 per Apartment per Month by Building Size and Location

	Post-46	<u>Pre-47</u>	<u>All</u>
Citywide	<b>\$632</b>	<b>\$492</b>	<b>\$535</b>
11-19 units	\$690	\$557	\$576
20-99 units	\$498	\$456	\$465
100+ units	\$767	\$723	\$755
Bronx	\$429	\$344	\$362
11-19 units	-	\$301	\$303
20-99 units	\$404	\$345	\$351
100+ units	\$477	\$394	\$432
Brooklyn	\$530	\$441	\$467
11-19 units	-	\$457	\$469
20-99 units	\$507	\$429	\$437
100+ units	\$514	\$527	\$519
Manhattan	\$1,117	\$698	\$801
11-19 units	\$752	\$757	\$757
20-99 units	\$792	\$634	\$647
100+ units	\$1,199	\$959	\$1,118
Queens	\$501	\$457	\$481
11-19 units	\$650	\$416	\$441
20-99 units	\$478	\$455	\$461
100+ units	\$493	\$538	\$503
St. Island 11-19 units 20-99 units 100+ units	\$418 - \$427 -	- - -	\$400 - \$402 -

	Post-46	<u>Pre-47</u>	<u>All</u>
Core Man	\$1,218	\$932	\$1,028
11-19 units	-	\$878	\$876
20-99 units	\$939	\$906	\$909
100+ units	\$1,271	\$1,064	\$1,192
Upper Man	\$790	\$469	\$511
11-19 units	-	\$516	\$517
20-99 units	\$590	\$453	\$458
100+ units	-	\$594	\$704
City w/o Core	\$510	\$410	\$440
11-19 units	\$688	\$324	\$392
20-99 units	\$474	\$399	\$415
100+ units	\$536	\$493	\$524

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, Brooklyn, Staten Island, Core Manhattan and Upper Manhattan; as well as 100+ unit buildings in Upper Manhattan and Staten Island, was too small to calculate reliable statistics. In addition, the number of Pre-47 rent stabilized buildings of all size groupings 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 2018, by Building Size and Age

	Taxes	Maint.	Labor	Admin.	Utilities	Fuel	Misc.	Insurance	<u>Total</u>
<b>Pre-47</b> 11-19 units 20-99 units 100+ units	<b>30.2%</b> 33.6% 28.6% 36.0%	<b>18.1%</b> 17.4% 18.7% 14.9%	<b>8.7%</b> 7.5% 7.9% 15.8%	<b>14.6%</b> 14.6% 14.9%	<b>10.1%</b> 9.0% 10.7% 7.3%	<b>8.4%</b> 8.1% 9.0% 4.8%	<b>4.5%</b> 4.8% 4.7% 2.8%	<b>5.5%</b> 5.2% 5.8% 3.5%	<b>100.0%</b> 100.0% 100.0% 100.0%
<b>Post-46</b>	<b>30.8%</b>	<b>16.3%</b>	<b>14.0%</b>	<b>15.4%</b>	<b>8.7%</b>	<b>5.6%</b>	<b>5.1%</b>	<b>4.1%</b>	<b>100.0%</b>
11-19 units	30.0%	17.7%	9.0%	15.5%	10.9%	6.9%	3.9%	6.0%	100.0%
20-99 units	28.1%	18.5%	10.4%	15.4%	10.3%	6.9%	5.3%	5.1%	100.0%
100+ units	32.9%	14.5%	17.1%	15.4%	7.3%	4.6%	5.1%	3.2%	100.0%
<b>All Bldgs.</b>	<b>30.4%</b>	<b>17.5%</b>	<b>10.5%</b>	<b>14.9%</b>	<b>9.6%</b>	<b>7.5%</b>	<b>4.7%</b>	<b>5.0%</b>	<b>100.0%</b>
11-19 units	33.1%	17.4%	7.7%	14.5%	9.2%	8.0%	4.7%	5.3%	100.0%
20-99 units	28.5%	18.6%	8.5%	14.8%	10.6%	8.5%	4.8%	5.7%	100.0%
100+ units	33.8%	14.6%	16.7%	15.2%	7.3%	4.6%	4.4%	3.3%	100.0%

	<u>Citywide</u>	Bronx	<u>Brooklyn</u>	Manhattan	Queens	Staten Island	Core Manh	Upper Manh
<b>Pre-47</b> 11-19 units 20-99 units 100+ units <b>All</b>	308 439 7 <b>754</b>	35 108 2 <b>145</b>	52 67 1 <b>120</b>	199 228 4 <b>431</b>	22 35 0 <b>57</b>	0 1 0 <b>1</b>	134 98 3 <b>235</b>	65 130 1 <b>196</b>
Post-46 11-19 units 20-99 units 100+ units All	8 40 12 <b>60</b>	2 9 0 <b>11</b>	0 8 1 9	6 8 11 <b>25</b>	0 13 - <b>13</b>	0 2 0 <b>2</b>	5 7 10 <b>22</b>	1 1 3
All Bidgs. 11-19 units 20-99 units 100+ units All	316 479 19 <b>814</b>	37 117 2 <b>156</b>	52 75 2 <b>129</b>	205 236 15 <b>456</b>	22 48 - <b>70</b>	0 3 0 <b>3</b>	139 105 13 <b>257</b>	66 131 2 <b>199</b>

### 7. Number of Distressed Buildings in 2018

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 2018

	# 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>	<u>90%</u>	<u>100%</u>
Citywide	15,012	0.51	0.56	0.59	0.63	0.66	0.70	0.74	0.80	0.91	4.36
Manhattan	6,084	0.49	0.54	0.58	0.61	0.64	0.68	0.73	0.81	0.94	4.36
Bronx	3,233	0.53	0.59	0.63	0.66	0.70	0.73	0.77	0.82	0.93	1.66
Brooklyn	3,606	0.51	0.56	0.60	0.63	0.66	0.69	0.73	0.78	0.87	2.35
Queens	2,013	0.51	0.56	0.59	0.63	0.65	0.69	0.73	0.78	0.87	2.69
St. Island	76	0.52	0.57	0.60	0.62	0.65	0.68	0.72	0.76	0.89	1.19

# 9. Number of Buildings and Dwelling Units in 2018 by Building Size and Location

		t-46	Pre-			All		
	<u>Bldgs.</u>	<u>DUs</u>	<u>Bldgs.</u>	DUs	<u>Bldgs.</u>	<u>DUs</u>		
Citywide	<b>1,851</b>	<b>189,402</b>	<b>13,161</b>	<b>486,522</b>	<b>15,012</b>	<b>675,924</b>		
11-19 units	137	2,014	3,519	53,325	3,656	55,339		
20-99 units	1,134	65,017	9,285	369,906	10,419	434,923		
100+ units	580	122,371	357	63,291	937	185,662		
Bronx	362	27,126	2,871	125,794	3,233	152,920		
11-19 units	14	223	339	5,136	353	5,359		
20-99 units	282	16,483	2,454	108,604	2,736	125,087		
100+ units	66	10,420	78	12,054	144	22,474		
Brooklyn	395	38,715	3,211	115,752	3,606	154,467		
11-19 units	22	317	916	13,716	938	14,033		
20-99 units	260	16,335	2,228	94,014	2,488	110,349		
100+ units	113	22,063	67	8,022	180	30,085		
Manhattan	446	60,780	5,638	188,516	6,084	249,296		
11-19 units	47	695	1,873	28,394	1,920	29,089		
20-99 units	203	10,273	3,617	126,042	3,820	136,315		
100+ units	196	49,812	148	34,080	344	83,892		
Queens	594	59,015	1,419	55,323	2,013	114,338		
11-19 units	47	683	384	5,973	431	6,656		
20-99 units	354	20,563	974	40,752	1,328	61,315		
100+ units	193	37,769	61	8,598	254	46,367		
St. Island	54	3,766	22	1,137	76	4,903		
11-19 units	7	96	7	106	14	202		
20-99 units	35	1,363	12	494	47	1,857		
100+ units	12	2,307	3	537	15	2,844		
Core Man	354	52,336	3,491	110,470	3,845	162,806		
11-19 units	32	481	1,432	21,750	1,464	22,231		
20-99 units	150	7,631	1,953	60,622	2,103	68,253		
100+ units	172	44,224	106	28,098	278	72,322		
Upper Man	92	8,444	2,147	78,046	2,239	86,490		
11-19 units	15	214	441	6,644	456	6,858		
20-99 units	53	2,642	1,664	65,420	1,717	68,062		
100+ units	24	5,588	42	5,982	66	11,570		

Note: DU = Dwelling Unit

# 10. Longitudinal Income and Expense Study, Estimated Average Rent, Income and Costs Changes (2017-2018) by Building Size and Location

		Post-46				Pre-47				All	
	<u>Rent</u>	Income	<u>Costs</u>	E	Rent	Income	<u>Costs</u>	E	lent	Income	<u>Costs</u>
Citywide 11-19 units 20-99 units 100+ units	<b>3.2%</b> 3.2% 3.1% 3.3%	<b>3.1%</b> 3.6% 3.3% 3.0%	<b>5.1%</b> 8.6% 5.5% 4.6%	3	<b>4.0%</b> 3.6% 4.0% 4.3%	<b>3.8%</b> 3.5% 3.8% 4.4%	<b>6.2%</b> 6.8% 6.2% 5.2%	3 3	<b>.7%</b> .6% .8% .6%	<b>3.6%</b> 3.5% 3.7% 3.4%	<b>5.8%</b> 7.0% 6.1% 4.8%
Bronx 11-19 units 20-99 units 100+ units	3.4% - 2.8% 3.8%	3.4% - 2.9% 3.7%	4.4% - 4.3% 3.9%	2	4.7% 4.3% 4.7% 4.3%	4.3% 3.6% 4.3% 4.7%	6.1% 6.7% 6.1% 6.5%	5 4	.4% .1% .4% .9%	4.1% 4.5% 4.1% 3.9%	5.8% 7.5% 5.8% 4.5%
Brooklyn 11-19 units 20-99 units 100+ units	3.3% - 2.7% 4.3%	3.7% - 3.3% 4.2%	5.7% - 6.3% 4.9%	2	4.0% 4.1% 4.0% 4.3%	4.2% 4.0% 4.2% 4.6%	5.6% 5.4% 5.6% 6.0%	4 3	.8% .3% .6% .3%	4.0% 4.1% 3.9% 4.3%	5.6% 5.1% 5.8% 5.3%
Manhattan 11-19 units 20-99 units 100+ units	3.1% 3.9% 3.1% 3.1%	2.6% 3.8% 3.2% 2.4%	5.5% 12.8% 8.9% 4.9%	3	3.7% 3.4% 3.6% 4.5%	3.4% 3.1% 3.2% 4.4%	6.4% 7.5% 6.5% 5.0%	3 3	.5% .4% .5% .5%	3.1% 3.2% 3.2% 3.0%	6.1% 7.6% 6.7% 4.9%
Queens 11-19 units 20-99 units 100+ units	2.9% 1.1% 3.2% 2.9%	3.2% 2.0% 3.2% 3.6%	4.5% 10.9% 4.4% 3.6%	3	3.4% 3.5% 3.3% 3.6%	3.4% 3.9% 3.3% 3.6%	6.7% 7.0% 7.0% 4.7%	2 3	.1% .5% .3% .0%	3.3% 3.1% 3.2% 3.6%	5.5% 8.5% 5.7% 3.8%
Staten Island 11-19 units 20-99 units 100+ units	6.4% - - -	6.2% - -	4.3% - - -		- - -	- - -	- - -		.0% - .5% -	5.8% - 6.3% -	5.8% - 5.4% -
Core Manhattan 11-19 units 20-99 units 100+ units	2.9% - 2.5% 3.0%	2.3% - 2.1% 2.3%	5.1% - 8.0% 4.7%	2	3.5% 2.9% 3.2% 4.8%	3.3% 2.7% 2.8% 4.7%	5.9% 6.9% 5.8% 5.3%	2 3	.3% .9% .1% .5%	2.9% 2.8% 2.7% 3.0%	5.6% 7.0% 6.0% 4.9%
Upper Manhattan 11-19 units 20-99 units 100+ units	4.1% - 4.4% -	4.0% - 5.4% -	7.9% - 10.8% -	2	3.9% 4.6% 3.9% 2.7%	3.6% 4.3% 3.6% 2.5%	7.1% 9.0% 7.1% 3.1%	4 4	.9% .6% .0% .6%	3.7% 4.3% 3.7% 3.1%	7.2% 9.0% 7.3% 5.4%
All City w/o Core 11-19 units 20-99 units 100+ units	3.3% 3.2% 3.1% 3.6%	3.5% 3.6% 3.4% 3.7%	5.1% 8.4% 5.3% 4.5%	2	4.1% 4.1% 4.1% 3.8%	4.0% 4.0% 4.0% 3.9%	6.3% 6.8% 6.3% 5.1%	3 3	.9% .9% .9% .6%	3.8% 3.9% 3.8% 3.8%	5.9% 7.1% 6.1% 4.6%

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, Brooklyn, 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. In addition, the number of Pre-47 rent stabilized buildings in all categories 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 (2017-2018) by Building Size and Location

		Post-46			Pre-47			All	
	Rent	Income	<u>Costs</u>	Ren	t Income	<u>Costs</u>	Rent	Income	<u>Costs</u>
Citywide 11-19 units 20-99 units 100+ units	<b>3.6%</b> 6.0% 3.9% 2.8%	<b>3.4%</b> 4.9% 3.9% 3.6%	<b>5.4%</b> 7.4% 6.0% 5.6%	<b>4.1</b> 9 3.89 4.19 4.19	6 4.5% 6 3.9%	<b>6.3%</b> 7.5% 6.2% 6.3%	<b>4.1%</b> 3.7% 3.9% 3.9%	<b>3.9%</b> 4.4% 3.7% 3.5%	<b>6.4%</b> 7.4% 6.2% 3.5%
Bronx 11-19 units 20-99 units 100+ units	2.7% - 2.6% 3.2%	2.7% - 3.3% 5.2%	3.3% - 3.4% 1.9%	5.19 8.39 4.79 2.89	6 5.0% 6 4.7%	6.3% 5.8% 6.1% 6.7%	4.7% 8.6% 4.6% 3.1%	4.5% 5.3% 4.5% 4.8%	6.0% 5.9% 5.9% 5.6%
Brooklyn 11-19 units 20-99 units 100+ units	2.7% - 2.5% 4.2%	3.6% - 2.8% 4.9%	6.5% - 6.7% 5.2%	3.49 5.29 3.39 5.49	6 5.6% 6 3.7%	6.0% 5.4% 6.9% 6.3%	3.5% 5.2% 3.2% 4.4%	3.9% 5.7% 3.9% 4.5%	6.2% 5.3% 6.5% 6.3%
Manhattan 11-19 units 20-99 units 100+ units	2.1% 5.4% 3.7% 2.2%	3.0% -1.5% 3.3% 1.8%	5.9% 6.4% 8.1% 4.3%	4.09 3.09 3.69 4.99	6 2.7% 6 3.2%	6.8% 7.5% 6.4% 5.1%	3.6% 3.1% 3.7% 3.4%	3.0% 2.6% 3.0% 3.5%	6.6% 7.6% 6.4% 4.3%
Queens 11-19 units 20-99 units 100+ units	2.4% 6.3% 3.0% 3.1%	3.3% 2.3% 1.8% 4.7%	3.8% 7.0% 5.7% 3.8%	2.8% 4.6% 2.7% 4.9%	6 3.3% 6 2.9%	8.1% 7.1% 7.4% 8.0%	2.7% 3.9% 2.6% 3.7%	3.0% 3.6% 3.0% 4.4%	6.7% 7.1% 5.9% 4.4%
Staten Island 11-19 units 20-99 units 100+ units	-0.1% - - -	4.3% - - -	3.1% - - -	-	- - -	- - -	3.6% - 3.8% -	2.9% - 4.5% -	6.9% - 9.1% -
Core Manhattan 11-19 units 20-99 units 100+ units	1.5% - 4.1% 4.8%	2.6% - 1.8% 0.2%	7.7% - 8.3% 2.4%	3.19 2.59 3.79 5.59	6 3.2% 6 2.6%	6.1% 6.1% 5.4% 5.7%	3.0% 2.7% 3.4% 2.4%	2.7% 3.3% 2.8% 2.8%	6.4% 6.2% 5.6% 4.1%
Upper Manhattan 11-19 units 20-99 units 100+ units	0.8% - 6.6% -	4.3% - 10.4% -	9.2% - 0.5% -	4.99 6.99 4.49 5.09	6.4% 4.2%	7.4% 11.1% 7.0% 2.9%	4.6% 6.5% 4.4% 4.8%	5.1% 6.3% 4.3% 3.7%	7.5% 11.0% 6.8% 6.1%
All City w/o Core 11-19 units 20-99 units 100+ units	3.5% 6.7% 3.6% 3.3%	3.8% 6.3% 3.5% 3.9%	6.0% 6.0% 5.0% 4.7%	4.0% 4.2% 3.9% 3.8%	6 5.1% 6 4.2%	6.7% 7.2% 6.4% 4.8%	3.8% 4.1% 3.9% 4.5%	4.1% 4.4% 4.3% 3.5%	6.5% 7.4% 6.4% 5.3%

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, Brooklyn, 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. In addition, the number of Pre-47 rent stabilized buildings in all categories 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 (2017-2018) by Building Size & Location

	Post-46	<u>Pre-47</u>	All
Citywide	<b>-0.3%</b>	<b>-0.7%</b>	<b>-0.6%</b>
11-19 units	-2.6%	-2.8%	-2.8%
20-99 units	-0.8%	-0.9%	-0.9%
100+ units	0.4%	2.8%	1.0%
Bronx	1.6%	0.3%	0.6%
11-19 units	-	-4.5%	-3.2%
20-99 units	0.2%	0.5%	0.4%
100+ units	3.3%	1.2%	2.8%
Brooklyn	0.0%	1.5%	1.0%
11-19 units	-	1.3%	2.4%
20-99 units	-2.2%	1.5%	0.4%
100+ units	2.8%	2.0%	2.5%
Manhattan	-1.9%	-2.0%	-1.9%
11-19 units	-9.8%	-4.5%	-4.5%
20-99 units	-5.3%	-2.6%	-2.9%
100+ units	-1.3%	3.3%	0.0%
Queens	0.8%	-2.3%	-0.5%
11-19 units	-8.3%	-1.8%	-5.1%
20-99 units	1.1%	-3.1%	-1.2%
100+ units	3.6%	1.8%	3.3%
St. Island 11-19 units 20-99 units 100+ units	9.9% - - -	- - -	5.8% - 8.2% -

	Post-46	<u>Pre-47</u>	<u>All</u>
Core Manhattan	-2.0%	-1.0%	-1.4%
11-19 units	-	-4.2%	-4.2%
20-99 units	-6.2%	-1.6%	-2.1%
100+ units	-1.4%	3.6%	0.0%
Upper Manhattan	-1.4%	-3.8%	-3.3%
11-19 units	-	-5.6%	-5.6%
20-99 units	-3.2%	-3.9%	-3.9%
100+ units	-	1.4%	-0.2%
All City w/o Core	0.7%	-0.6%	-0.2%
11-19 units	-2.4%	-1.7%	-1.9%
20-99 units	-0.2%	-0.7%	-0.6%
100+ units	2.4%	1.7%	2.2%

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, Brooklyn, 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. In addition, the number of Pre-47 rent stabilized buildings in all categories 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 (2017-2018)

CD	Neighborhood	Rent Change	NOI Change
Manhattan 102 103 104 105 106 107 108 109 110 111 112	Greenwich Village Lower East Side/Chinatown Chelsea/Clinton Midtown Stuyvesant Town/Turtle Bay Upper West Side Upper East Side Morningside Hts./Hamilton Hts. Central Harlem East Harlem Washington Hts./Inwood	3.1% 3.8% 2.8% 4.2% 3.0% 2.0% 3.3% 5.6% 4.0% 5.1% 3.8%	-1.7% 1.4% -3.1% -1.2% -3.8% -10.4% 0.1% 2.5% -6.3% -3.2% -3.6%
Bronx 201 202 203 204 205 206 207 208 209 210 211 212	Mott Haven/Port Morris Hunts Point/Longwood Morrisania/Melrose/Claremont Highbridge/S. Concourse University Heights/Fordham E. Tremont/Belmont Kingsbridge Hts./Mosholu/Norwood Riverdale/Kingsbridge Soundview/Parkchester Throgs Neck/Co-op City Pelham Parkway Williamsbridge/Baychester	4.4% 3.3% 2.1% 5.1% 6.2% 4.2% 4.6% 3.4% 5.6% 3.4% 4.1%	-1.9% 0.0% 0.8% 1.9% 3.1% -1.2% -1.9% 2.0% 1.0% 5.4% 1.8% -3.2%
Brooklyn 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318	Williamsburg/Greenpoint Brooklyn Hts./Fort Greene Bedford Stuyvesant Bushwick East New York/Starett City Park Slope/Carroll Gardens Sunset Park North Crown Hts./Prospect Hts. South Crown Hts. Bay Ridge Bensonhurst Borough Park Coney Island Flatbush Sheepshead Bay/Gravesend Brownsville/Ocean Hill East Flatbush Flatlands/Canarsie	2.9% 7.4% 7.2% 7.4% 3.4% 4.8% 2.4% 4.7% 4.4% 2.6% 2.2% 4.2% 3.7% 2.2% 5.4% 3.8% 5.3%	-4.9% 5.5% 15.1% 24.4% -9.4% 6.6% -2.6% 3.9% -0.1% 3.8% -0.6% -2.6% 1.9% 2.3% -4.5% 2.5% 3.1% 2.1%
Queens 401 402 403 404 405 406 407 408 409 412 414	Astoria Sunnyside/Woodside Jackson Hts. Elmhurst/Corona Middle Village/Ridgewood Forest Hills/Rego Park Flushing/Whitestone Hillcrest/Fresh Meadows Kew Gardens/Woodhaven Jamaica Rockaways	3.5% 2.9% 3.1% 3.8% 3.1% 2.2% 2.1% 4.8% 3.0% 4.1% 2.6%	-1.9% -3.8% -2.5% -0.3% 3.0% 3.1% -1.5% 3.3% -0.5% -2.5% 4.7%
Staten Island 501	North Shore	6.1%	8.1%

Note: Six Community Districts (CDs) contained too few buildings to be included in the analysis. Source: NYC Department of Finance, RPIE Filings

# 14. Longitudinal Analysis, Number of Buildings and Dwelling Units in 2017 & 2018, by Building Size and Location

	Pos	t-46	Pre-4	47	Α	All		
	<u>Bldgs.</u>	DUs	Bldgs.	DUs	Bldgs.	DUs		
Citywide	<b>1,704</b>	<b>175,918</b>	<b>11,951</b>	<b>449,519</b>	<b>13,658</b>	<b>625,787</b>		
11-19 units	116	1,713	3,099	46,938	3,215	48,651		
20-99 units	1,044	60,215	8,507	341,417	9,552	401,684		
100+ units	544	113,990	345	61,164	891	175,452		
Bronx	343	25,991	2,592	115,121	2,935	141,112		
11-19 units	11	181	286	4,356	297	4,537		
20-99 units	269	15,755	2,232	99,844	2,501	115,599		
100+ units	63	10,055	74	10,921	137	20,976		
Brooklyn	351	35,797	2,868	105,101	3,219	140,898		
11-19 units	16	232	770	11,517	786	11,749		
20-99 units	228	14,514	2,037	86,281	2,265	100,795		
100+ units	107	21,051	61	7,303	168	28,354		
Manhattan	412	55,994	5,174	176,190	5,586	232,184		
11-19 units	42	621	1,698	25,724	1,740	26,345		
20-99 units	190	9,671	3,330	116,661	3,520	126,332		
100+ units	180	45,702	146	33,805	326	79,507		
Queens	549	54,533	1,297	52,020	1,846	106,553		
11-19 units	41	594	339	5,251	380	5,845		
20-99 units	326	19,064	897	38,171	1,223	57,235		
100+ units	182	34,875	61	8,598	243	43,473		
St. Island	49	3,603	20	1,087	69	4,690		
11-19 units	6	85	6	90	12	175		
20-99 units	31	1,211	11	460	42	1,671		
100+ units	12	2,307	3	537	15	2,844		
Core Manhattan	325	47,653	3,224	104,272	3,549	151,925		
11-19 units	29	434	1,303	19,787	1,332	20,221		
20-99 units	140	7,105	1,816	56,510	1,956	63,615		
100+ units	156	40,114	105	27,975	261	68,089		
Upper Manhattan	87	8,341	1,950	71,918	2,037	80,259		
11-19 units	13	187	395	5,937	408	6,124		
20-99 units	50	2,566	1,514	60,151	1,564	62,717		
100+ units	24	5,588	41	5,830	65	11,418		

Note: DU = Dwelling Unit