# 2019 Income and Expense Study

**April 4, 2019** 

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# 2019 Income and Expense Study

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### **What's New**

- ✓ From 2016 to 2017, Net Operating Income (revenue remaining after operating expenses are paid) grew 0.4%.
   This is the 13th consecutive year that Net Operating Income has increased.
- ☑ Rental income increased an average of 3.0% from 2016-2017.
- ☑ Total income increased an average of 3.0% from 2016-2017.
- ☑ Operating costs increased an average of 4.5% from 2016-2017.

### 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 acquired 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 2017, the year for which the most recent data set is available, and the extent to which these conditions changed from the prior year, 2016.

### 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 rent stabilized buildings are analyzed, 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 15,395 properties containing 694,485 units.

### **RPIE Study**

### Rents and Income<sup>1</sup>

In 2017, rent stabilized property owners collected monthly rent averaging \$1,353 per unit. As in previous years, units in pre-war buildings rented for less on average (\$1,273 per month) than those in post-war buildings (\$1,534 per month).<sup>2</sup> At the borough level, the average monthly rents in stabilized buildings were \$1,850 in Manhattan (\$2,247 in Core Manhattan<sup>3</sup> and \$1,343 in Upper Manhattan); \$1,301 in Queens; \$1,224 in Brooklyn; \$1,046 in Staten Island; and \$1,006 in the Bronx. Average monthly rent per unit in the City, excluding Core Manhattan, was \$1,204.

The median monthly rent Citywide was \$1,208. At the borough level, median rent was \$1,632 in Manhattan (\$1,898 in Core Manhattan and \$1,226 in Upper Manhattan); \$1,267 in Queens; \$1,140 in Brooklyn; \$1,080 in Staten Island; and \$997 in the Bronx.

Many owners of stabilized buildings augment income from their apartment rents by selling services to their tenants as well as by renting commercial space. Current RPIE filings show an average monthly gross income of \$1,524 per unit in 2017, with pre-war buildings earning \$1,440 per unit and post-war properties earning \$1,716 per unit. Gross income was highest in Manhattan, at \$2,297 per unit per month (\$2,729 in Core Manhattan, and \$1,562 in Upper Manhattan) and lowest in the Bronx, at \$1,122. In between are Queens, at \$1,385, Brooklyn, at \$1,301; and Staten Island, at \$1,141. Monthly income per unit in the City, excluding Core Manhattan, was \$1,299. 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 11.2% share of the total income earned by building owners in 2017, down half a percentage point from the previous year. By borough, income earned from services and commercial rents was 16.5% in Manhattan (17.7% in Core Manhattan and 14.1% in Upper Manhattan); 10.4% in the Bronx; 8.3% in Staten Island; and 6.0% in both Brooklyn and Queens. The graph on this page shows the average rent and income collected in 2017 by borough, and for the City.

Median Citywide income for owners in 2017 was \$1,309. At the borough level, Manhattan had the highest median income, at \$1,897 (\$2,219 in Core Manhattan and \$1,384 in Upper Manhattan); followed by Queens at \$1,317; Brooklyn at \$1,193; Staten Island at \$1,153; and the Bronx at \$1,083. Median monthly income per unit in the City, excluding Core Manhattan, was \$1,196. (For rent and

income averages and medians by borough and building age and size, see details in Appendices 3 and 4.)

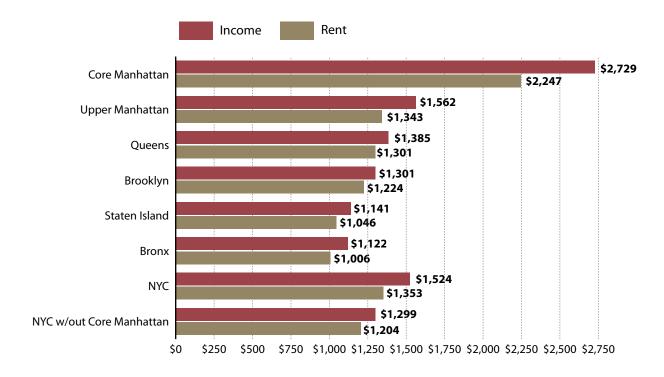
### **Comparing Rent Measurements**

Two independent data sources, the triennial NYC Housing and Vacancy Survey (HVS) and the NYS Homes and Community Renewal (HCR) annual registration data, provide important comparative rent data to the collected rents stated in NYC Department of Finance (RPIE) filings. A comparison of the collected RPIE rents to the HVS and HCR rents reflects both how well owners are able to collect the rent roll and the prevalence of vacancies.

Rents included in RPIE filings are different than HVS and HCR figures primarily because of differences in how average rents are computed. RPIE data reflects actual building-wide rent collections

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

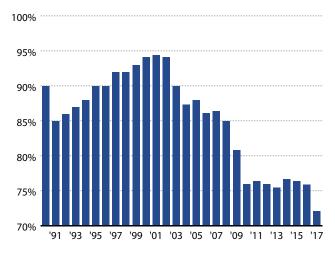
### Income and Rent Highest in Manhattan in 2017



\* See endnote 1 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, 2017 RPIE Data

### Average Monthly Citywide Collected Rents as a Share of Average Monthly HCR Legal Registered Rents, 1990-2017

### Percentage of Legal Rent Collected Decreased in 2017



Source: HCR Annual Rent Registrations; NYC Department of Finance, 1990-2017 RPIE Data

that account for vacancies; non-payment of rent and both regulated and unregulated apartments. HVS data consists of contract rent (the amounts stated on leases, which includes both legal and preferential rents) while HCR data consists of legal rents registered annually with the agency. Furthermore, RPIE information reflects rents collected over a 12-month period; HCR data reflects rents registered on April 1, 2017; and 2017 HVS figures are contract rents in effect during the first four months of 2017. Because 2017 was the most recent year in which the HVS was conducted, it is possible to compare rent data from all three sources.

The latest RPIE and HVS data (2017) shows that the HVS average contract rent of \$1,269 for all rent stabilized apartments was 6.2% less than the RPIE average collected rent of \$1,353 among buildings containing rent stabilized buildings.<sup>4</sup> In 2014, the RPIE average collected rent was 4.1% more than the HVS average rent.

HVS and RPIE data can also be analyzed by the age of the building. The 2017 HVS average contract rent in older, pre-war apartments was \$1,225, which

was 3.8% lower than the 2017 RPIE average collected rent of \$1,273. And the HVS average rent for units built after 1946, \$1,400, was 8.7% lower than the RPIE average rent of \$1,534.

Another comparison can be made between annual RPIE and HCR average rents. From 2016 to 2017, the gap was 27.9%, as indicated by the average RPIE rent of \$1,353 and HCRs average stabilized rent of \$1,876. This is a 3.8 percentage point increase from the 24.1% 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. The increase in the gap between collected and legal rent indicates that building owners are collecting a smaller proportion of the maximum legal rent in 2017. (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 2017, Queens property owners collected an average rent (\$1,301) that was 25.1% below HCR's average legal rent for the borough (\$1,738), while owners in the other boroughs collected average rents that were 25.2% lower in the Bronx; 26.4% lower in Brooklyn; 29.3% lower than legal rents in Manhattan; and 37.4% 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>5</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 a seventh consecutive year. RPIE rent growth, up 3.0%, was greater than the increase in the RGB rent index, which was up 2.0%, between 2016 and 2017 (adjusted to a calendar year).<sup>6</sup>

There are 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

### Rent Comparisons, 1990-2017

### 2016-17 HCR Legal Rents Grew Faster Than RPIE Collected Rents and RGB Rent Index

	RPIE	HCR	RGB
	Rent	Rent	Rent
	Growth	Growth	Index
		(Adjusted)§	(Adjusted)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%	2.0%
1990 to			
2017*‡	200.3%	229.5%	174.3%

Ø See endnote 6 § See endnote 7

Sources: NYS HCR Annual Rent Registrations;

NYC Department of Finance, 1990-2017 RPIE Data

both collected rents and RGB rent guidelines from 1990 to 2017. During that period, HCR adjusted legal rents increased 229.5%<sup>7</sup>; RPIE collected rents increased 200.3%; and the RGB Rent Index increased 174.3% (figures not adjusted for inflation).<sup>8</sup>

### **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, this data does not distinguish between expenses for commercial space and those for 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 maintenance costs for commercial space.

The average monthly operating cost for units in stabilized buildings was \$984 in 2017. Costs were lower in units in pre-war structures (\$944), and higher among post-war buildings (\$1,075). Geographically, average costs were lowest in the Bronx (\$763); Staten Island (\$768); Brooklyn (\$837); and Queens (\$892); and highest in Manhattan (\$1,397). Within Manhattan, costs for units located in Core Manhattan averaged \$1,678 a month, while the costs in Upper Manhattan were \$1,037. Excluding Core Manhattan, the average monthly operating costs for stabilized building owners in New York City was \$846. The graph on the next page details average monthly expenses by cost category and building age for 2017. The graph shows that taxes make up the largest share of expenses, averaging 29.6% of all costs among rent stabilized buildings.

Citywide, 2017 median expenses were \$870. By borough, Manhattan had the highest median costs, at \$1,182 (\$1,350 in Core Manhattan and \$929 in Upper Manhattan); followed by Queens at \$825; Brooklyn at \$778; Staten Island at \$738 and the Bronx at \$737. Median monthly expenses in the City, excluding Core Manhattan, was \$795. (Appendices 1, 2 and 3 break down average costs by borough and building age; Appendix 4 details median costs; and Appendix 6 details distribution of costs.)

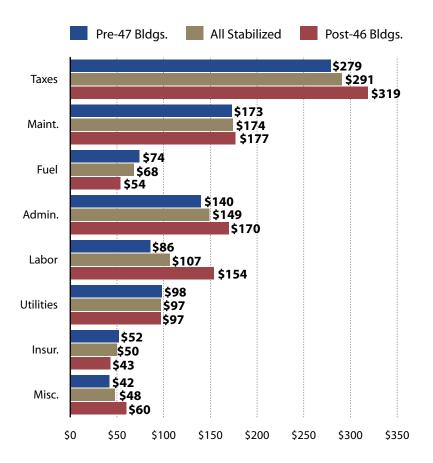
In 1992, the NYC Department of Finance and RGB staff tested RPIE expense data for accuracy.

<sup>‡</sup> See endnote 8

<sup>\*</sup> Not adjusted for inflation

### Average Monthly Expense per Dwelling Unit per Month

Taxes Remain Largest Expense in 2017



Source: NYC Department of Finance, 2017 RPIE Data

Initial examinations found that most "miscellaneous" costs 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 2017 RPIE O&M cost (\$984) by the results of the 1992 audit

results in an average monthly O&M cost of \$904.

Just as buildings without commercial space typically revenue generate less than stabilized properties with space, commercial operating expenses in these buildings tend to be lower on average than in buildings with a mixture of uses. In 2017, unaudited average O&M costs for "residential-only" buildings were \$893 per month and average audit-adjusted O&M costs for these buildings were \$820 per month.

### "Distressed" Building

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 2017, 768 buildings, equal to 5.0% of the total number of rent stabilized buildings, had reported O&M costs that exceeded gross income, a tenth of a point higher than the prior year, when the lowest figure ever recorded in this study occurred. 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 28-year history of this study. This year's 5.0% figure represents the second lowest ever recorded (see graph on the next page).

Most distressed stabilized properties (60%) are mid-sized buildings, containing 20 to 99 units. In addition, the vast majority (93%) are pre-war buildings. By borough, 51% of the buildings are in Manhattan; while the remaining buildings are in the Bronx or Brooklyn (20% each); Queens (8%) and

### Percent of Distressed Properties, 1990-2017

# Share of Distressed Properties Increases Slightly



Source: NYC Department of Finance, 1990-2017 RPIE Data

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 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 \$540 of net income per month in 2017, with units in post-war buildings earning more (\$641 per month) than those in pre-war buildings (\$496 per month). Average monthly NOI is greater among stabilized properties in Manhattan (\$820) than for those in the other boroughs: \$493 in Queens; \$464 in Brooklyn; \$373 in Staten Island; and \$359 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 \$1,051 per unit per month in NOI, twice as much as properties in Upper Manhattan, which earned an average NOI of \$525. The monthly NOI average calculated Citywide, excluding Core Manhattan, was \$453. Looking at the NOI using audit-adjusted expense figures, the Citywide NOI in 2017 was \$620.

Average monthly unaudited NOI in "residential-only" properties Citywide was \$482 per unit in 2017, 10.8% 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 improvements; and for pre-income tax 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 \$540 per unit by the typical size of buildings in this year's analysis (an average of 45.1 units) yields an estimated average annual NOI of about \$292,394 in 2017. Excluding Core Manhattan, the monthly NOI of \$453 per unit multiplied by the typical size of buildings in this year's analysis outside Core Manhattan (an average of 46.1 units) yields an estimated average annual NOI of about \$250,797.

### **Operating Cost Ratios**

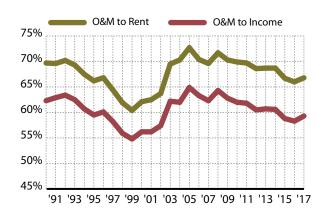
Another way to evaluate the financial conditions of New York City's rent stabilized housing is by measuring the ratio of expenses to revenues. Traditionally, the RGB has used O&M Cost-to-Income and O&M Cost-to-Rent ratios to assess the overall health of the stabilized housing stock, assuming that buildings 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 2017, the proportion of total income and rent collections spent on audit-adjusted operating costs has fluctuated. The audit-adjusted

Cost-to-Income ratio in 2017 was 59.3%, a one percentage point increase from the prior year's 58.3%. This means that on average, owners of rent stabilized properties spent roughly 59.3 cents out of every dollar of revenue on operating and maintenance costs in 2017. Looking at unaudited expenses, the cost-to-income ratio in 2017 was 64.6, a 1.2 percentage point increase from the prior year. The unaudited median cost-to-income ratio was 64% in 2017.

Examining the ratio of costs to rent collections, audit-adjusted operating costs in 2017 were 66.8% of revenues from rent, up eight-tenths of a percentage point from the prior year. Using unaudited expenses, the cost-to-rent ratio in 2017 was 72.7%, a 0.9 percentage point increase. Looking at the unaudited median cost-to-rent ratio, it was 71% in 2017.

Rents, income, and costs per unit were on average highest in Core Manhattan in 2017 (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 1990-2017

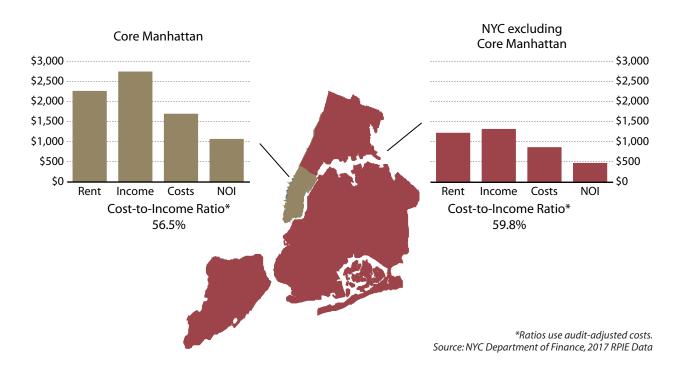
### Cost-to-Income and Cost-to-Rent Ratios Increase in 2017



Source: NYC Dept. of Finance, 1990-2017 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, 2017

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



Manhattan, the average revenue and costs figures are lower, resulting in different expense to revenue ratios. The audit-adjusted Cost-to-Income Ratio for the rest of the City was 59.8%, higher than the Cost-to-Income Ratio for stabilized buildings in Manhattan's Core (56.5%). These figures indicate that on average, owners of stabilized properties outside of Core Manhattan spend about 3.3 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

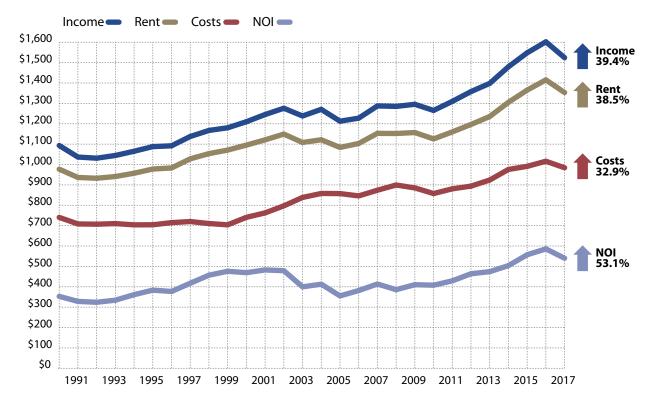
cost-to-income ratios of 0.64 or less. This means that half the building owners spent no more than 64 cents out of every dollar of revenue on operating and maintenance costs in 2017. Looking at the 70% decile level Citywide, seven out of every ten building owners pay no more than 73 cents of every dollar of revenue on operating and maintenance 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

### Citywide Income, Rent, Costs and NOI After Inflation, 1990-2017

Inflation-Adjusted Net Operating Income Up 53.1% Since 1990 (Average Monthly Income, Rent, Operating Costs and NOI per Dwelling Unit in Constant 2017 Dollars)



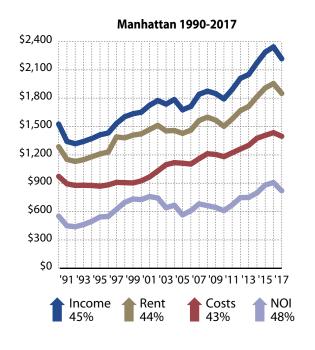
Note: Percent changes are point-to-point measurements.

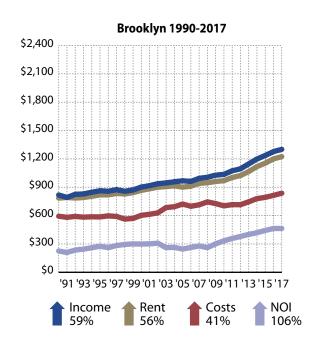
Sources: NYC Rent Guidelines Board Income and Expense Studies, 1992-2019;

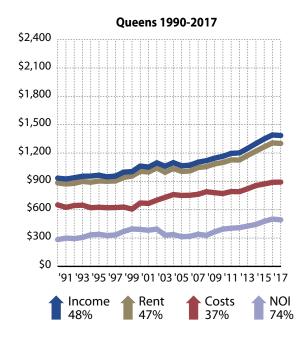
NYC Department of Finance, 1990-2017 RPIE Data

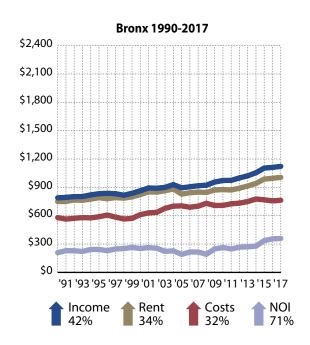
### Income, Rent, Costs and NOI After Inflation per Borough, 1990-2017

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 2017 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, 1992-2019; NYC Department of Finance, 1990-2017 RPIE Data net operating income). Adjusting NOI as well as rent, income and costs figures for inflation (in constant 2017 dollars) and comparing different base years to the latest data available is a useful way to assess the health of the stabilized housing stock and 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 2017, after adjusting for inflation, NOI has increased 53.1% (see graph on page 11). This indicates that revenues have outpaced expenses to the extent that average monthly NOI was worth 53.1% more in 2017 than it was in 1990, after adjusting for inflation.<sup>9</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 2017, inflation-adjusted rent increased a cumulative 38.5%, income by 39.4%, and costs by 32.9%, resulting in the increase in NOI, after inflation, of 53.1%.

Examining the ratio of NOI to income, since 1990, the ratio 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 eight 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 each of the boroughs individually, from 1990 to 2017, all boroughs saw sizable increases in their net income, with Brooklyn seeing the largest increase, with NOI increasing 106%; followed by Queens, up 74%; the Bronx, up 71%; and Manhattan, up 48% (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 14,332 buildings from 2016 to 2017.

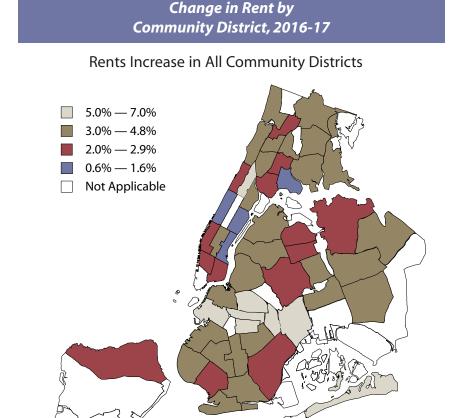
### **Rents and Income**

Rent collections increase for a number of reasons, including increases allowed under RGB renewal guidelines; vacancy allowances; termination of preferential rents; individual apartments improvements; and building-wide major capital improvements (MCIs).

Average rent collections in stabilized buildings grew by 3.0% in 2017. Rent collections in pre-war buildings grew at a higher rate, up 3.2%, than in post-war buildings, which rose by 2.8%. Rent collections increased the greatest among smaller, 11-19 unit buildings, up 3.5%; while rents grew 3.2% among mid-sized, 20-99 unit buildings; and the least among large, 100+ unit buildings, up 2.3%. Examining rent collections by borough, Brooklyn saw the largest increase, up 4.1%; followed by Queens, up 3.4%; Staten Island, up 3.3%; the Bronx, up 3.0%; and Manhattan, up 2.3%. Within Manhattan, Upper Manhattan rents grew at a faster rate, up 3.5%, than the 1.7% increase in rents in Core Manhattan. Rent collections in the City, excluding Core Manhattan, rose 3.5%. The growth in median rent Citywide was 3.3%.

Looking at rent collections throughout New York City, every Community District saw increases in average rent from 2016 to 2017.<sup>10</sup>

At the neighborhood level, the greatest rent growth was found in Rockaway, Queens, seeing rents rise by 7.0%, and in Central Harlem, Manhattan, rising 6.0%. Comparatively, higher rent increases were also seen in several Brooklyn neighborhoods, including Park Slope/Carroll Gardens, up 5.8%; Bedford Stuyvesant, up 5.6%; Brownsville/Ocean Hill, up 5.4%, and East New York/Starett City, up 5.1%. The neighborhood in the Bronx seeing the highest growth in rents was Riverdale/Kingsbridge, up 4.1%. See map on next page and Appendix 13 for a breakdown of changes



Source: NYC Department of Finance, 2016-17 RPIE Data

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, grew by the same percentage as rent, up 3.0% from 2017 to 2018. Revenues grew faster in pre-war buildings, up 3.2%, compared to 2.8% among post-war buildings. Brooklyn saw the highest growth in income, rising 4.1%; followed by Queens, up 3.4%; the Bronx, up 3.1%; Staten Island, up 2.9%; and Manhattan, up 2.4%. Within Manhattan, Upper Manhattan income rose 3.5%; while Core Manhattan income grew by 1.9%. Total income in the City, excluding Core Manhattan, grew 3.5%. The median growth in income Citywide was 4.0%.

### **Operating Costs**

Citywide, average expenses in stabilized buildings increased 4.5% from 2016 to 2017. Both pre-war and post-war buildings rose by the same amount. However, the change in operating costs varied by borough. Costs grew the most in Manhattan, up 5.1%; followed by 4.8% in Brooklyn; 4.7% in Queens; 3.6% on Staten Island: and 3.2% in the Bronx. Within Manhattan, Core Manhattan costs rose by 5.2%; while Upper Manhattan costs grew by 4.8%. Operating costs in the City, excluding Core Manhattan, rose 4.3%. Median Citywide expenses also rose 4.3%. For a detailed breakdown of the changes in rent, income and costs by building size, age and location, see Appendices 10 and 11.

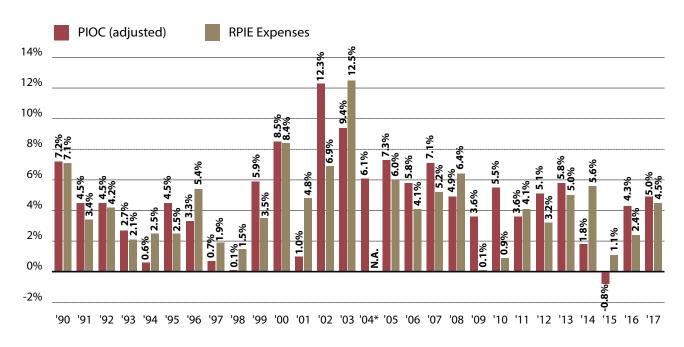
### **RPIE Expenses and the PIOC**

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 on the calendar year. (See endnote 7.) 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

### Change in Operating & Maintenance Costs, RPIE and the PIOC, 1990 to 2017





\*Longitudinal RPIE data for 2004 is unavailable (see endnote 11). Sources: NYC Department of Finance, 1990-2017 RPIE Data; RGB Price Index of Costs (PIOC) 1990-2017

grew by 5.0% from 2016 to 2017, the same period as the 4.5% increase in I&E costs, close to a half percentage point difference. (See graph on this page.)

From 1990-91 to 2016-17, cumulative growth in owners' costs as measured by the two indices varied. Overall nominal costs measured in the PIOC increased at a greater rate, 210.7%, compared to RPIE data, which grew 186.0% over this period.<sup>11</sup>

### **Operating Cost Ratios**

Between 2016 and 2017, the proportion of gross income spent on audit-adjusted expenses (the O&M Cost-to-Income ratio) increased, rising by eight-tenths of a percentage point. The proportion of rental income used for audit-adjusted expenses (the O&M Cost-to-Rent ratio) likewise rose, increasing by one percentage point.

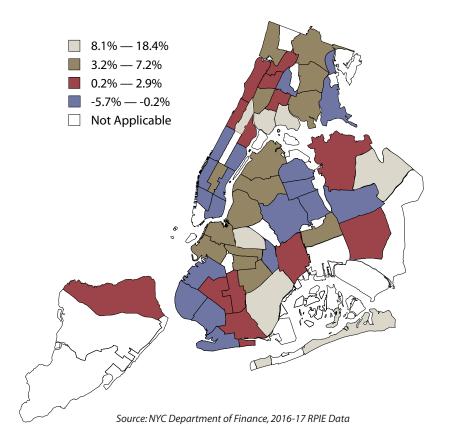
### **Net Operating Income**

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. Since actual average collected income grew more than actual average operating costs, Citywide net operating income in rent stabilized buildings increased but the increase was just 0.4% in 2017, the smallest increase over the thirteen consecutive years that NOI has grown. Citywide, NOI in pre-war buildings increased 0.6%, while newer, post-war buildings grew by 0.1%.

The average change in NOI from 2016 to 2017 differed throughout the City. NOI increased in each borough except Manhattan. NOI grew the most in the Bronx, rising 2.9%; while it rose 2.7% in Brooklyn; 1.5% on Staten Island; and 1.3% in Queens. In Manhattan, NOI declined 2.0%, though the decline occurred solely in Core Manhattan, falling 3.1%, while NOI rose 1.0% in Upper Manhattan. Monthly

### Change in NOI by Community District, 2016-17

## Net Operating Income Grows in Two-Thirds of Community Districts



NOI in the City, excluding Core Manhattan, increased 2.1%. See Appendix 12 for a breakdown of NOI by borough, building age and building size.

At the Community District level, NOI rose in two-thirds of the City. The neighborhoods seeing the greatest growth in NOI were Central Harlem, Manhattan, up 18.4%; the Rockaways, in Queens, up 16.8%; Bedford Stuyvesant, Brooklyn, up 15.6%; and Mott Haven/Port Morris, the Bronx, up 10.7%. Meanwhile, of the one-third of neighborhoods seeing NOI decline, the largest was on the Upper West Side of Manhattan, declining 5.7%; Throgs Neck/Co-op City, down 4.8%; Stuyvesant Town/Turtle Bay, falling 4.6%; and Forest Hills/Rego Park, Queens, down 3.9%. The largest decline in Brooklyn was in Bensonhurst, falling 2.2%. The map on this page and

Appendix 13 shows how NOI varied in each neighborhood throughout NYC. (See endnote 10.)

### **Summary**

RPIE filings, from almost 15,400 rent stabilized buildings containing close to 694,500 units in the main RPIE study, and from over 14,300 buildings containing almost 653,000 units in the longitudinal study, were analyzed in this year's Income and Expense Study. Citywide, rent average and revenue collections each rose 3.0%; and expenses rose by 4.5%. Despite the greater rate of increase in expenses, Net Operating Income (NOI) Citywide increased by 0.4%. (This is because the larger percentage increase for expenses is on a smaller basis.) This is the 13th consecutive year that NOI has increased. (See table on next page for historical data.) However, the proportion of distressed properties Citywide rose 0.1 percentage point, to 5.0%. While an uptick is of concern, the proportion of distressed properties

remains low by historical standards. In addition, the audit-adjusted cost-to-income ratio was 59.3%, an increase of one percentage point from the previous year.

### Methodology

The information in this report was generated by analyzing data sets derived from RPIE forms filed with the NYC Department of Finance in 2018 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 2017, was made available to the RGB beginning in December 2018 for analysis. Unit averages contained in this analysis

# Changes in Average Monthly Rent, Income, Operating Costs and Net Operating Income per Dwelling Unit, 1990-2017

### Net Operating Income (NOI) Increased for 13th Consecutive Year in 2016-17

	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%

Note: Longitudinal data from 2003-04 is unavailable. Source: NYC Department of Finance, 1990-2017 RPIE Data 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. 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. It is important to note that these medians 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 2017, or alternatively, TCIE (Tax Commission Income & Expense) forms. 12 Data from the forms was used to compute average and median rents, operating costs, etc., that were typical of the year 2017. Longitudinal data, which provides a direct comparison of identical elements over time, encompasses properties that filed RPIE/TCIE forms for the years 2016 and 2017. The longitudinal data describes changing conditions in average rents, operating costs, etc., by comparing forms from the same buildings over two years. Thus, the main part report measures conditions existing throughout 2017, while the longitudinal data section measures changes in conditions that occurred from 2016 to 2017.

This year, 15,395 buildings containing rent stabilized units were analyzed in the main RPIE study and 14,332 buildings were examined in the longitudinal study. The collection of buildings was created by matching a list of properties registered with HCR against building data found in 2018 RPIE or TCIE statements (or 2017 and 2018 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:
- Owners who did not file an RPIE or TCIE form in 2018 for the main part of this study, or an RPIE or TCIE form in both 2017 and 2018 for the longitudinal study;
- 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 consequently 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**

- RPIE rent figures include money collected for apartments, owneroccupied or related space and government subsidies. Income encompasses all revenue from rent, including commercial rent, sales of services, such as laundry, parking, and vending, and all other operating income.
- Pre-war buildings refer to those built before 1947; post-war buildings refer to those built after 1946.
- Core Manhattan represents the area south of W 110th and E 96th Streets. Upper Manhattan is the remainder of the borough.
- 4. Average rent stabilized contract rents for 2017 were computed using the 2017 NYC Housing and Vacancy Survey (HVS).
- 5. 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% of all 2017 apartment registrations filed indicate a preferential rent.
- 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 7.
- 7. 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.
- 8. 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, 200.3%, 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 189.3% and the HCR rent increased 234.9%.
- 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. Six Community Districts 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.
- 11. 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 2017 per Apartment per Month by Building Size and Location, Structures Built Before 1947

	Taxes	<u>Labor</u>	<u>Fuel</u>	Water/Sewer	Light & Power	Maint.	Admin.	Insurance	Misc.	<u>Total</u>
Citywide	<b>\$279</b>	<b>\$86</b>	<b>\$74</b>	<b>\$74</b>	<b>\$24</b>	<b>\$173</b>	<b>\$140</b>	<b>\$52</b>	<b>\$42</b>	<b>\$944</b>
11-19 units	\$352	\$82	\$81	\$74	\$26	\$183	\$157	\$56	\$59	\$1,072
20-99 units	\$248	\$74	\$74	\$75	\$23	\$169	\$132	\$52	\$40	\$887
100+ units	\$455	\$206	\$56	\$65	\$31	\$197	\$192	\$46	\$35	\$1,283
Bronx	\$151	\$72	\$84	\$82	\$25	\$159	\$109	\$58	\$23	\$762
11-19 units	\$158	\$81	\$99	\$89	\$27	\$162	\$109	\$62	\$29	\$817
20-99 units	\$151	\$71	\$83	\$81	\$25	\$159	\$109	\$58	\$23	\$758
100+ units	\$152	\$90	\$73	\$82	\$20	\$172	\$118	\$54	\$16	\$779
Brooklyn	\$223	\$65	\$64	\$74	\$19	\$161	\$121	\$50	\$35	\$813
11-19 units	\$245	\$70	\$74	\$71	\$22	\$178	\$129	\$51	\$36	\$877
20-99 units	\$215	\$61	\$64	\$75	\$19	\$157	\$118	\$50	\$36	\$794
100+ units	\$262	\$101	\$52	\$71	\$22	\$166	\$132	\$47	\$29	\$881
Manhattan	\$458	\$121	\$74	\$69	\$29	\$204	\$201	\$52	\$72	\$1,279
11-19 units	\$524	\$99	\$82	\$76	\$32	\$206	\$220	\$61	\$97	\$1,398
20-99 units	\$400	\$92	\$74	\$69	\$25	\$198	\$184	\$51	\$71	\$1,166
100+ units	\$677	\$311	\$55	\$57	\$44	\$231	\$263	\$44	\$34	\$1,716
Queens	\$267	\$76	\$69	\$66	\$20	\$158	\$108	\$47	\$33	\$844
11-19 units	\$247	\$64	\$81	\$65	\$21	\$150	\$87	\$48	\$28	\$790
20-99 units	\$268	\$71	\$68	\$66	\$21	\$162	\$112	\$47	\$30	\$844
100+ units	\$293	\$131	\$54	\$65	\$15	\$153	\$117	\$45	\$60	\$933
Core Man	\$647	\$150	\$65	\$60	\$31	\$219	\$240	\$51	\$74	\$1,536
11-19 units	\$646	\$101	\$77	\$71	\$30	\$224	\$239	\$62	\$95	\$1,544
20-99 units	\$597	\$100	\$63	\$56	\$25	\$206	\$223	\$49	\$81	\$1,400
100+ units	\$780	\$351	\$54	\$54	\$48	\$245	\$288	\$45	\$28	\$1,892
Upper Man	\$275	\$92	\$82	\$78	\$27	\$189	\$162	\$52	\$69	\$1,027
11-19 units	\$287	\$95	\$92	\$84	\$36	\$171	\$182	\$60	\$100	\$1,107
20-99 units	\$270	\$87	\$82	\$77	\$26	\$193	\$159	\$52	\$65	\$1,011
100+ units	\$320	\$171	\$60	\$67	\$30	\$182	\$175	\$42	\$53	\$1,099
City w/o Core	\$212	\$74	\$75	\$76	\$23	\$165	\$122	\$53	\$37	\$837
11-19 units	\$240	\$75	\$83	\$75	\$25	\$167	\$126	\$54	\$46	\$891
20-99 units	\$205	\$71	\$75	\$77	\$23	\$165	\$121	\$53	\$35	\$825
100+ units	\$259	\$118	\$58	\$71	\$21	\$167	\$133	\$47	\$38	\$912

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 2017 per Apartment per Month by Building Size and Location, Structures Built After 1946

	<u>Taxes</u>	Labor	<u>Fuel</u>	Water/Sewer	Light & Power	Maint.	Admin.	Insurance	Misc.	<u>Total</u>
Citywide	<b>\$319</b>	<b>\$154</b>	<b>\$54</b>	<b>\$63</b>	<b>\$34</b>	<b>\$177</b>	<b>\$170</b>	<b>\$43</b>	\$60	<b>\$1,075</b>
11-19 units	\$209	\$78	\$55	\$59	\$42	\$170	\$135	\$50	\$50	\$847
20-99 units	\$240	\$95	\$55	\$64	\$29	\$163	\$142	\$45	\$44	\$879
100+ units	\$416	\$225	\$53	\$61	\$38	\$191	\$203	\$41	\$77	\$1,304
Bronx 11-19 units	\$143 -	\$98	\$67 -	\$75 -	\$37	\$149 -	\$133 -	\$45 -	\$23	\$771
20-99 units	\$143	\$80	\$70	\$74	\$36	\$145	\$119	\$48	\$25	\$739
100+ units	\$147	\$127	\$62	\$76	\$38	\$153	\$157	\$41	\$20	\$822
Brooklyn	\$226	\$109	\$47	\$62	\$30	\$169	\$148	\$46	\$58	\$895
11-19 units	-	-	-	-	-	-	-	-	-	-
20-99 units	\$230	\$90	\$47	\$63	\$26	\$170	\$156	\$46	\$54	\$882
100+ units	\$226	\$151	\$44	\$63	\$35	\$153	\$126	\$43	\$63	\$903
Manhattan	\$660	\$307	\$57	\$53	\$44	\$220	\$280	\$44	\$93	\$1,758
11-19 units	\$597	\$106	\$68	\$59	\$46	\$235	\$230	\$54	\$11	\$1,406
20-99 units	\$472	\$141	\$57	\$54	\$35	\$189	\$215	\$47	\$53	\$1,264
100+ units	\$706	\$350	\$57	\$52	\$47	\$227	\$296	\$43	\$103	\$1,880
Queens	\$266	\$119	\$51	\$64	\$29	\$168	\$134	\$39	\$62	\$932
11-19 units	\$220	\$70	\$52	\$58	\$40	\$135	\$108	\$43	\$41	\$767
20-99 units	\$262	\$101	\$54	\$63	\$28	\$162	\$128	\$41	\$48	\$885
100+ units	\$282	\$152	\$47	\$65	\$27	\$183	\$149	\$36	\$83	\$1,025
St. Island	\$193	\$95	\$50	\$58	\$23	\$165	\$107	\$47	\$21	\$759
11-19 units	-	-	-	-	-	-	-	-	-	-
20-99 units	\$176	\$70	\$50	\$59	\$22	\$159	\$105	\$51	\$15	\$706
100+ units	-	-	-	-		-	-	-	-	-
Core Man	\$772	\$346	\$57	\$51	\$44	\$224	\$305	\$44	\$117	\$1,961
11-19 units	-	-	-	-	-	-	-	-	-	-
20-99 units	\$628	\$165	\$51	\$49	\$31	\$215	\$239	\$44	\$65	\$1,487
100+ units	\$799	\$380	\$58	\$52	\$46	\$225	\$317	\$44	\$127	\$2,049
Upper Man 11-19 units	\$295 -	\$183 -	\$57 -	\$57 -	\$46 -	\$205	\$199 -	\$41 -	\$15 -	\$1,099
20-99 units	\$258	\$109	\$65	\$61	\$40	\$153	\$182	\$51	\$37	\$956
100+ units	-	-	-	-	-	-	-	-	-	-
City w/o Core	\$226	\$114	\$54	\$65	\$32	\$166	\$142	\$43	\$48	\$890
11-19 units	\$199	\$78	\$55	\$59	\$41	\$168	\$132	\$50	\$50	\$832
20-99 units	\$219	\$91	\$56	\$65	\$29	\$160	\$137	\$45	\$43	\$846
100+ units	\$240	\$154	\$50	\$66	\$34	\$174	\$150	\$39	\$54	\$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 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 2017 per Apartment per Month by Building Size and Location

		Post-46			Pre-47			All	
	Rent	<u>Income</u>	<u>Costs</u>	Rent	<u>Income</u>	<u>Costs</u>	Rent	<u>Income</u>	Costs
Citywide	<b>\$1,534</b>	<b>\$1,716</b>	<b>\$1,075</b>	<b>\$1,273</b>	<b>\$1,440</b>	<b>\$944</b>	<b>\$1,353</b>	<b>\$1,524</b>	<b>\$984</b>
11-19 units	\$1,398	\$1,544	\$847	\$1,361	\$1,642	\$1,072	\$1,367	\$1,628	\$1,039
20-99 units	\$1,288	\$1,395	\$879	\$1,211	\$1,348	\$887	\$1,228	\$1,358	\$885
100+ units	\$1,807	\$2,071	\$1,304	\$1,720	\$1,986	\$1,283	\$1,782	\$2,046	\$1,298
Bronx	\$1,075	\$1,191	\$771	\$987	\$1,104	\$762	\$1,006	\$1,122	\$763
11-19 units	-	-	-	\$973	\$1,133	\$817	\$971	\$1,132	\$814
20-99 units	\$1,055	\$1,139	\$739	\$985	\$1,100	\$758	\$992	\$1,104	\$756
100+ units	\$1,117	\$1,278	\$822	\$1,074	\$1,171	\$779	\$1,094	\$1,222	\$799
Brooklyn	\$1,334	\$1,434	\$895	\$1,177	\$1,245	\$813	\$1,224	\$1,301	\$837
11-19 units	-	-	-	\$1,221	\$1,323	\$877	\$1,238	\$1,340	\$881
20-99 units	\$1,326	\$1,415	\$882	\$1,156	\$1,216	\$794	\$1,174	\$1,237	\$803
100+ units	\$1,282	\$1,404	\$903	\$1,300	\$1,384	\$881	\$1,289	\$1,397	\$895
Manhattan	\$2,453	\$2,903	\$1,758	\$1,655	\$1,994	\$1,279	\$1,850	\$2,217	\$1,397
11-19 units	\$1,640	\$2,273	\$1,406	\$1,655	\$2,186	\$1,398	\$1,655	\$2,186	\$1,398
20-99 units	\$1,806	\$2,115	\$1,264	\$1,550	\$1,820	\$1,166	\$1,571	\$1,844	\$1,174
100+ units	\$2,616	\$3,098	\$1,880	\$2,200	\$2,654	\$1,716	\$2,476	\$2,948	\$1,825
Queens	\$1,343	\$1,442	\$932	\$1,251	\$1,316	\$844	\$1,301	\$1,385	\$892
11-19 units	\$1,327	\$1,459	\$767	\$1,152	\$1,218	\$790	\$1,174	\$1,248	\$787
20-99 units	\$1,295	\$1,384	\$885	\$1,261	\$1,321	\$844	\$1,271	\$1,339	\$855
100+ units	\$1,402	\$1,506	\$1,025	\$1,358	\$1,449	\$933	\$1,391	\$1,492	\$1,003
St. Island 11-19 units 20-99 units 100+ units	\$1,031 - \$1,008 -	\$1,135 - \$1,065 -	\$759 - \$706 -	- - - -	- - -	- - -	\$1,046 - \$1,034	\$1,141 - \$1,092 -	\$768 - \$732 -
Core Man	\$2,724	\$3,225	\$1,961	\$2,008	\$2,480	\$1,536	\$2,247	\$2,729	\$1,678
11-19 units	-	-	-	\$1,808	\$2,455	\$1,544	\$1,804	\$2,451	\$1,542
20-99 units	\$2,144	\$2,501	\$1,487	\$1,943	\$2,319	\$1,400	\$1,957	\$2,332	\$1,406
100+ units	\$2,835	\$3,360	\$2,049	\$2,411	\$2,941	\$1,892	\$2,666	\$3,194	\$1,987
Upper Man	\$1,576	\$1,858	\$1,099	\$1,307	\$1,517	\$1,027	\$1,343	\$1,562	\$1,037
11-19 units	-	-	-	\$1,351	\$1,651	\$1,107	\$1,357	\$1,650	\$1,101
20-99 units	\$1,338	\$1,582	\$956	\$1,290	\$1,489	\$1,011	\$1,291	\$1,492	\$1,010
100+ units	-	-	-	\$1,463	\$1,648	\$1,099	\$1,553	\$1,783	\$1,127
City w/o Core	\$1,286	\$1,401	\$890	\$1,168	\$1,255	\$837	\$1,204	\$1,299	\$846
11-19 units	\$1,392	\$1,525	\$832	\$1,147	\$1,232	\$891	\$1,193	\$1,286	\$816
20-99 units	\$1,241	\$1,334	\$846	\$1,153	\$1,232	\$825	\$1,173	\$1,255	\$819
100+ units	\$1,335	\$1,479	\$962	\$1,289	\$1,389	\$912	\$1,322	\$1,455	\$945

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.

# 4. Median Rent, Income and Costs in 2017 per Apartment per Month by Building Size and Location

		Post-46			Pre-47			All	
	Rent	<u>Income</u>	Costs	Rent	<u>Income</u>	Costs	Rent	<u>Income</u>	Costs
Citywide	<b>\$1,290</b>	<b>\$1,379</b>	<b>\$891</b>	<b>\$1,196</b>	<b>\$1,297</b>	<b>\$867</b>	<b>\$1,208</b>	<b>\$1,309</b>	<b>\$870</b>
11-19 units	\$1,260	\$1,417	\$835	\$1,321	\$1,490	\$1,010	\$1,319	\$1,486	\$998
20-99 units	\$1,215	\$1,294	\$835	\$1,163	\$1,246	\$835	\$1,168	\$1,252	\$835
100+ units	\$1,430	\$1,537	\$1,056	\$1,342	\$1,419	\$909	\$1,391	\$1,508	\$1,018
Bronx	\$1,058	\$1,114	\$721	\$991	\$1,078	\$740	\$997	\$1,083	\$737
11-19 units	-	-	-	\$953	\$1,082	\$776	\$952	\$1,082	\$774
20-99 units	\$1,056	\$1,093	\$723	\$992	\$1,073	\$735	\$997	\$1,076	\$734
100+ units	\$1,091	\$1,199	\$686	\$1,093	\$1,197	\$776	\$1,092	\$1,199	\$757
Brooklyn	\$1,260	\$1,334	\$848	\$1,128	\$1,175	\$770	\$1,140	\$1,193	\$778
11-19 units	-	-	-	\$1,141	\$1,206	\$814	\$1,146	\$1,210	\$820
20-99 units	\$1,257	\$1,322	\$825	\$1,120	\$1,162	\$751	\$1,129	\$1,174	\$757
100+ units	\$1,258	\$1,348	\$872	\$1,285	\$1,325	\$819	\$1,259	\$1,328	\$846
Manhattan	\$2,179	\$2,522	\$1,465	\$1,600	\$1,865	\$1,164	\$1,632	\$1,897	\$1,182
11-19 units	\$1,545	\$1,856	\$1,177	\$1,678	\$2,054	\$1,297	\$1,672	\$2,052	\$1,295
20-99 units	\$1,962	\$2,138	\$1,208	\$1,554	\$1,734	\$1,088	\$1,573	\$1,757	\$1,093
100+ units	\$2,835	\$3,242	\$1,889	\$2,091	\$2,456	\$1,650	\$2,586	\$2,956	\$1,773
Queens	\$1,331	\$1,408	\$915	\$1,241	\$1,283	\$796	\$1,267	\$1,317	\$825
11-19 units	\$1,286	\$1,353	\$728	\$1,145	\$1,193	\$753	\$1,158	\$1,200	\$749
20-99 units	\$1,280	\$1,357	\$872	\$1,268	\$1,311	\$809	\$1,271	\$1,320	\$830
100+ units	\$1,389	\$1,490	\$1,014	\$1,364	\$1,427	\$890	\$1,380	\$1,475	\$976
St. Island 11-19 units 20-99 units 100+ units	\$1,056 - \$1,068 -	\$1,144 - \$1,092 -	\$737 - \$706 -	- - -	- - -	- - -	\$1,080 - \$1,089 -	\$1,153 - \$1,099 -	\$738 - \$711 -
Core Man	\$2,495	\$2,855	\$1,636	\$1,868	\$2,176	\$1,328	\$1,898	\$2,219	\$1,350
11-19 units	-	-	-	\$1,796	\$2,211	\$1,399	\$1,794	\$2,209	\$1,396
20-99 units	\$2,113	\$2,325	\$1,301	\$1,901	\$2,123	\$1,268	\$1,920	\$2,135	\$1,272
100+ units	\$2,897	\$3,398	\$1,998	\$2,389	\$2,822	\$1,876	\$2,797	\$3,227	\$1,964
Upper Man	\$1,459	\$1,610	\$921	\$1,221	\$1,380	\$930	\$1,226	\$1,384	\$929
11-19 units	-	-	-	\$1,253	\$1,499	\$996	\$1,264	\$1,499	\$992
20-99 units	\$1,239	\$1,368	\$884	\$1,217	\$1,356	\$913	\$1,217	\$1,356	\$912
100+ units	-	-	-	\$1,254	\$1,391	\$985	\$1,433	\$1,610	\$1,022
City w/o Core	\$1,223	\$1,301	\$836	\$1,105	\$1,180	\$790	\$1,120	\$1,196	\$795
11-19 units	\$1,238	\$1,347	\$772	\$1,125	\$1,215	\$820	\$1,128	\$1,217	\$818
20-99 units	\$1,177	\$1,238	\$808	\$1,097	\$1,169	\$782	\$1,106	\$1,176	\$784
100+ units	\$1,310	\$1,399	\$940	\$1,235	\$1,310	\$827	\$1,277	\$1,367	\$896

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.

# 5. Average Net Operating Income in 2017 per Apartment per Month by Building Size and Location

	Post-46	Pre-47	<u>All</u>
Citywide	<b>\$641</b>	<b>\$496</b>	<b>\$540</b>
11-19 units	\$698	\$570	\$589
20-99 units	\$516	\$461	\$473
100+ units	\$767	\$703	\$748
Bronx	\$420	\$342	\$359
11-19 units	-	\$316	\$318
20-99 units	\$400	\$342	\$348
100+ units	\$456	\$392	\$423
Brooklyn	\$540	\$432	\$464
11-19 units	-	\$446	\$459
20-99 units	\$533	\$422	\$434
100+ units	\$501	\$503	\$502
Manhattan	\$1,145	\$715	\$820
11-19 units	\$867	\$788	\$789
20-99 units	\$851	\$654	\$670
100+ units	\$1,218	\$938	\$1,123
Queens	\$510	\$472	\$493
11-19 units	\$692	\$428	\$461
20-99 units	\$499	\$477	\$484
100+ units	\$481	\$516	\$489
St. Island 11-19 units 20-99 units 100+ units	\$376 - \$295 -	- - -	\$373 - \$360 -

	Post-46	<u>Pre-47</u>	<u>All</u>
Core Man	\$1,264	\$944	\$1,051
11-19 units	-	\$911	\$909
20-99 units	\$1,014	\$919	\$926
100+ units	\$1,311	\$1,049	\$1,207
Upper Man	\$759	\$490	\$525
11-19 units	-	\$544	\$549
20-99 units	\$626	\$478	\$482
100+ units	-	\$549	\$656
City w/o Core	\$511	\$428	\$453
11-19 units	\$693	\$419	\$470
20-99 units	\$488	\$421	\$436
100+ units	\$517	\$490	\$509

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.

Source: NYC Department of Finance, RPIE Filings

### 6. Distribution of Operating Costs in 2017, 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 11-19 units 20-99 units 100+ units	29.5%	18.4%	9.1%	14.9%	10.4%	7.8%	4.5%	5.6%	100%
	32.8%	17.1%	7.7%	14.7%	9.4%	7.6%	5.5%	5.3%	100%
	27.9%	19.1%	8.3%	14.9%	11.0%	8.3%	4.5%	5.9%	100%
	35.5%	15.3%	16.1%	15.0%	7.5%	4.4%	2.7%	3.6%	100%
Post-46 11-19 units 20-99 units 100+ units	29.7%	16.4%	14.3%	15.8%	9.0%	5.1%	5.6%	4.0%	100%
	24.6%	20.1%	9.3%	15.9%	11.9%	6.5%	5.9%	5.9%	100%
	27.3%	18.6%	10.8%	16.2%	10.7%	6.3%	5.0%	5.1%	100%
	31.9%	14.6%	17.3%	15.5%	7.6%	4.1%	5.9%	3.1%	100%
All Bldgs. 11-19 units 20-99 units 100+ units	<b>29.6%</b> 31.8% 27.8% 32.9%	<b>17.7%</b> 17.5% 19.0% 14.8%	<b>10.8%</b> 7.9% 8.9% 16.9%	<b>15.2%</b> 14.8% 15.2% 15.4%	9.9% 9.7% 10.9% 7.6%	<b>6.9%</b> 7.5% 7.9% 4.2%	<b>4.8%</b> 5.6% 4.6% 5.0%	<b>5.0%</b> 5.3% 5.7% 3.3%	100% 100% 100% 100%

### 7. Number of "Distressed" Buildings in 2017

	<u>Citywide</u>	Bronx	<u>Brooklyn</u>	Manhattan	Queens	Staten Island	Core Manh	Upper Manh
Pre-47 11-19 units 20-99 units 100+ units All	282 427 5 <b>714</b>	30 110 1 <b>141</b>	59 86 1 <b>146</b>	169 202 3 <b>374</b>	24 28 0 <b>52</b>	0 1 0 1	120 84 2 <b>206</b>	49 118 1 <b>168</b>
Post-46 11-19 units 20-99 units 100+ units All	7 35 12 <b>54</b>	3 11 0 <b>14</b>	2 6 2 <b>10</b>	2 8 7 <b>17</b>	0 9 3 <b>12</b>	0 1 0 1	2 4 6 <b>12</b>	0 4 1 <b>5</b>
All Bldgs. 11-19 units 20-99 units 100+ units All	289 462 17 <b>768</b>	33 121 1 <b>155</b>	61 92 3 <b>156</b>	171 210 10 <b>391</b>	24 37 3 <b>64</b>	0 2 0 <b>2</b>	122 88 8 <b>218</b>	49 122 2 <b>173</b>

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 2017

	# of Bldgs	<u>10%</u>	20%	<u>30%</u>	<u>40%</u>	<u>50%</u>	<u>60%</u>	<u>70%</u>	80%	90%	100%
Citywide	15,395	0.49	0.54	0.58	0.61	0.64	0.68	0.73	0.79	0.89	4.63
Manhattan	6,215	0.47	0.52	0.56	0.59	0.62	0.66	0.71	0.78	0.92	4.63
Bronx	3,378	0.52	0.58	0.62	0.65	0.68	0.72	0.76	0.81	0.90	1.90
Brooklyn	3,654	0.50	0.54	0.58	0.62	0.65	0.68	0.72	0.77	0.87	3.15
Queens	2,064	0.49	0.54	0.57	0.60	0.63	0.67	0.71	0.76	0.85	2.43
St. Island	84	0.53	0.56	0.60	0.64	0.65	0.71	0.74	0.78	0.89	1.16

# 9. Number of Buildings and Dwelling Units in 2017 by Building Size and Location

	Pos		Pre-		A	
	Bldgs.	<u>DUs</u>	<u>Bldgs.</u>	<u>DUs</u>	<u>Bldgs.</u>	<u>DUs</u>
Citywide 11-19 units 20-99 units 100+ units	<b>1,942</b> 157 1,186 599	195,557 2,322 67,594 125,641	<b>13,453</b> 3,603 9,475 375	<b>498,928</b> 54,451 377,176 67,301	<b>15,395</b> 3,760 10,661 974	<b>694,485</b> 56,773 444,770 192,942
Bronx	398	30,554	2,980	129,976	3,378	160,530
11-19 units	20	306	356	5,364	376	5,670
20-99 units	306	17,821	2,544	112,269	2,850	130,090
100+ units	72	12,427	80	12,343	152	24,770
Brooklyn	409	39,187	3,245	117,337	3,654	156,524
11-19 units	29	429	914	13,706	943	14,135
20-99 units	264	16,379	2,260	95,105	2,524	111,484
100+ units	116	22,379	71	8,526	187	30,905
Manhattan	445	60,806	5,770	193,995	6,215	254,801
11-19 units	44	657	1,932	29,199	1,976	29,856
20-99 units	205	10,413	3,681	128,027	3,886	138,440
100+ units	196	49,736	157	36,769	353	86,505
Queens	628	60,417	1,436	56,414	2,064	116,831
11-19 units	57	833	394	6,076	451	6,909
20-99 units	372	21,405	979	41,315	1,351	62,720
100+ units	199	38,179	63	9,023	262	47,202
St. Island	62	4,593	22	1,206	84	5,799
11-19 units	7	97	7	106	14	203
20-99 units	39	1,576	11	460	50	2,036
100+ units	16	2,920	4	640	20	3,560
Core Man	345	50,722	3,557	113,867	3,902	164,589
11-19 units	30	452	1,463	22,148	1,493	22,600
20-99 units	147	7,445	1,983	61,552	2,130	68,997
100+ units	168	42,825	111	30,167	279	72,992
Upper Man	100	10,084	2,213	80,128	2,313	90,212
11-19 units	14	205	469	7,051	483	7,256
20-99 units	58	2,968	1,698	66,475	1,756	69,443
100+ units	28	6,911	46	6,602	74	13,513

Note: DU = Dwelling Unit

# 10. Longitudinal Income and Expense Study, Estimated Average Rent, Income and Costs Changes (2016-2017) by Building Size and Location

		Post-46			Pre-47			AII	
	<u>Rent</u>	<u>Income</u>	<u>Costs</u>	Rent	<u>Income</u>	<u>Costs</u>	Rent	Income	<u>Costs</u>
Citywide 11-19 units 20-99 units 100+ units	2.8% 3.8% 3.1% 2.4%	2.8% 3.6% 3.3% 2.5%	<b>4.5%</b> 5.0% 3.6% 5.1%	3.2% 3.4% 3.3% 2.0%	3.2% 3.4% 3.3% 1.7%	<b>4.5%</b> 4.7% 4.3% 5.9%	3.0% 3.5% 3.2% 2.3%	3.0% 3.4% 3.3% 2.2%	<b>4.5%</b> 4.7% 4.2% 5.3%
Bronx	2.4%	2.4%	2.7%	3.1%	3.3%	3.3%	3.0%	3.1%	3.2%
11-19 units	-	-	-	4.5%	4.5%	3.3%	4.1%	4.5%	4.4%
20-99 units	2.0%	2.0%	3.1%	3.0%	3.2%	3.3%	2.9%	3.0%	3.2%
100+ units	3.0%	2.9%	1.5%	4.0%	3.4%	3.4%	3.2%	3.0%	1.9%
Brooklyn	4.2%	4.1%	4.2%	4.0%	4.0%	5.1%	4.1%	4.1%	4.8%
11-19 units	-	-	-	4.9%	4.9%	6.3%	4.9%	4.7%	5.8%
20-99 units	4.1%	4.3%	4.4%	4.1%	4.0%	4.8%	4.1%	4.1%	4.7%
100+ units	4.2%	3.8%	3.9%	1.9%	2.9%	5.2%	3.3%	3.5%	4.4%
Manhattan	1.5%	1.8%	5.1%	2.6%	2.6%	5.1%	2.3%	2.4%	5.1%
11-19 units	1.6%	4.0%	3.2%	2.4%	2.5%	4.3%	2.4%	2.6%	4.3%
20-99 units	1.1%	1.8%	2.6%	3.0%	3.0%	4.9%	2.8%	2.9%	4.7%
100+ units	1.6%	1.8%	5.5%	1.6%	1.1%	6.5%	1.6%	1.6%	5.8%
Queens	3.4%	3.4%	4.9%	3.3%	3.4%	4.4%	3.4%	3.4%	4.7%
11-19 units	3.7%	3.5%	4.8%	3.6%	3.6%	4.4%	3.6%	3.6%	4.6%
20-99 units	3.4%	3.5%	3.6%	3.3%	3.5%	4.3%	3.3%	3.5%	4.0%
100+ units	3.4%	3.3%	6.2%	2.9%	2.8%	4.6%	3.3%	3.2%	5.9%
Staten Island 11-19 units 20-99 units 100+ units	3.9% - - -	3.3% - - -	4.1% - -	- - -	- - -	- - -	3.3% - 3.0% -	2.9% - 2.9% -	3.6% - 2.5% -
Core Manhattan	1.3%	1.9%	4.8%	2.0%	1.9%	5.5%	1.7%	1.9%	5.2%
11-19 units	-	-	-	1.7%	2.0%	5.2%	1.7%	2.0%	5.2%
20-99 units	1.4%	2.0%	2.9%	2.3%	2.2%	4.8%	2.2%	2.2%	4.6%
100+ units	1.3%	1.8%	5.0%	1.6%	0.9%	7.4%	1.3%	1.5%	5.7%
Upper Manhattan	3.1%	1.8%	6.8%	3.6%	3.8%	4.4%	3.5%	3.5%	4.8%
11-19 units	-	-	-	4.0%	4.2%	2.0%	4.0%	4.2%	2.0%
20-99 units	0.5%	1.4%	2.0%	3.7%	3.9%	5.1%	3.5%	3.7%	4.9%
100+ units	-	-	-	2.0%	1.9%	1.5%	3.4%	1.9%	6.3%
All City w/o Core	3.5%	3.3%	4.4%	3.5%	3.6%	4.2%	3.5%	3.5%	4.3%
11-19 units	3.9%	3.6%	5.1%	4.4%	4.4%	4.4%	4.3%	4.3%	4.5%
20-99 units	3.3%	3.4%	3.7%	3.5%	3.6%	4.2%	3.5%	3.5%	4.1%
100+ units	3.6%	3.1%	5.1%	2.5%	2.8%	4.0%	3.3%	3.0%	4.8%

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.

# 11. Longitudinal Income and Expense Study, Estimated Median Rent, Income and Costs Changes (2016-2017) by Building Size and Location

		Post-46			Pre-47			All	
	Rent	Income	<u>Costs</u>	Rent	Income	<u>Costs</u>	Rent	Income	Costs
Citywide 11-19 units 20-99 units 100+ units	2.4% 3.7% 1.6% 4.2%	3.2% 2.6% 2.4% 3.7%	3.9% 6.1% 3.2% 3.0%	<b>3.4%</b> 4.9% 3.5% 3.4%	4.0% 2.9% 3.8% 2.2%	<b>4.4%</b> 4.7% 4.4% 4.3%	3.3% 5.0% 3.2% 2.6%	<b>4.0%</b> 3.0% 3.6% 3.0%	<b>4.3%</b> 4.8% 4.1% 4.0%
Bronx	1.4%	1.2%	4.9%	3.2%	2.9%	3.6%	3.2%	2.7%	3.5%
11-19 units	-	-	-	4.0%	2.6%	2.8%	4.3%	3.3%	3.1%
20-99 units	1.1%	0.7%	3.5%	3.2%	2.7%	3.7%	3.0%	2.5%	3.4%
100+ units	2.8%	1.8%	5.9%	4.3%	3.2%	2.7%	4.0%	1.9%	2.7%
Brooklyn	3.2%	3.2%	4.6%	3.3%	3.3%	4.1%	3.4%	3.6%	4.3%
11-19 units	-	-	-	3.4%	3.1%	6.4%	3.9%	2.4%	6.1%
20-99 units	2.9%	3.3%	4.1%	3.5%	3.0%	3.2%	3.3%	2.9%	3.0%
100+ units	3.5%	2.3%	5.5%	4.5%	1.5%	0.9%	3.5%	2.6%	3.4%
Manhattan	1.9%	3.4%	4.2%	2.9%	3.7%	5.1%	2.9%	3.2%	5.5%
11-19 units	0.7%	4.4%	11.3%	2.6%	2.1%	3.3%	2.7%	1.8%	3.4%
20-99 units	2.5%	2.2%	3.7%	3.8%	3.4%	5.1%	3.7%	3.4%	5.0%
100+ units	1.6%	2.3%	7.0%	0.4%	-2.8%	4.8%	2.4%	1.6%	6.8%
Queens 11-19 units 20-99 units 100+ units	3.2%	3.9%	3.5%	3.7%	4.2%	4.9%	3.5%	3.8%	4.9%
	5.2%	2.5%	4.5%	3.2%	4.6%	5.5%	2.7%	4.1%	5.4%
	2.5%	3.4%	3.8%	3.7%	3.9%	4.6%	3.5%	3.6%	5.2%
	2.7%	3.2%	4.1%	3.3%	4.0%	4.6%	3.3%	2.8%	3.0%
Staten Island 11-19 units 20-99 units 100+ units	5.9% - - -	2.3% - - -	3.1% - - -	- - -	- - -	- - -	6.9% - 7.0% -	1.7% - 8.3% -	3.3% - 2.6% -
Core Manhattan	1.8%	2.3%	3.3%	2.2%	1.4%	4.5%	2.0%	1.6%	4.6%
11-19 units	-	-	-	2.7%	0.7%	4.3%	2.8%	0.5%	4.3%
20-99 units	0.9%	3.8%	0.2%	1.4%	2.0%	5.7%	2.0%	2.0%	5.4%
100+ units	1.5%	3.0%	5.0%	-0.8%	-0.3%	10.3%	1.0%	1.9%	5.3%
Upper Manhattan	5.3%	3.1%	5.3%	4.4%	4.4%	5.5%	4.3%	4.3%	5.4%
11-19 units	-	-	-	5.5%	7.1%	2.2%	5.8%	7.0%	2.1%
20-99 units	-1.9%	-0.8%	5.2%	4.6%	3.6%	5.2%	4.5%	3.6%	5.2%
100+ units	-	-	-	2.5%	2.1%	7.9%	4.5%	6.2%	3.9%
All City w/o Core	2.0%	2.9%	4.4%	3.7%	3.2%	4.2%	3.4%	3.3%	4.5%
11-19 units	5.4%	2.5%	5.9%	3.8%	3.8%	4.8%	3.6%	4.1%	4.8%
20-99 units	2.4%	2.4%	4.7%	3.5%	3.0%	4.3%	3.4%	3.0%	4.1%
100+ units	2.8%	2.4%	1.5%	3.4%	4.2%	1.8%	2.7%	2.7%	4.4%

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.

# 12. Longitudinal Income and Expense Study, Avg. Net Operating Income Changes (2016-2017) by Building Size & Location

	Post-46	<u>Pre-47</u>	<u>All</u>	
Citywide	<b>0.1%</b>	<b>0.6%</b>	<b>0.4%</b>	Core Manhattan
11-19 units	1.9%	1.1%	1.2%	11-19 units
20-99 units	2.6%	1.5%	1.8%	20-99 units
100+ units	-1.8%	-5.0%	-2.7%	100+ units
Bronx	2.0%	3.2%	2.9%	Upper Manhattan
11-19 units	-	7.8%	4.7%	11-19 units
20-99 units	0.0%	3.0%	2.5%	20-99 units
100+ units	5.8%	3.4%	5.2%	100+ units
Brooklyn	4.0%	2.1%	2.7%	All City w/o Core
11-19 units	-	2.5%	2.9%	11-19 units
20-99 units	4.1%	2.4%	2.9%	20-99 units
100+ units	3.6%	-0.8%	1.8%	100+ units
Manhattan	-2.9%	-1.6%	-2.0%	
11-19 units	5.4%	-0.4%	-0.3%	
20-99 units	0.6%	-0.1%	-0.1%	
100+ units	-3.5%	-7.6%	-4.7%	
Queens	0.8%	1.8%	1.3%	
11-19 units	2.0%	2.2%	2.1%	
20-99 units	3.4%	2.1%	2.7%	
100+ units	-2.4%	-0.2%	-2.0%	
St. Island	1.6%	-	1.5%	
11-19 units	-	-	-	
20-99 units	-	-	3.8%	
100+ units	-	-	-	

	Post-46	Pre-47	<u>All</u>
Core Manhattan	-2.4%	-3.6%	-3.1%
11-19 units	-	-3.0%	-2.8%
20-99 units	0.6%	-1.4%	-1.1%
100+ units	-2.9%	-9.0%	-4.7%
Upper Manhattan	-5.4%	2.5%	1.0%
11-19 units	-	9.0%	9.0%
20-99 units	0.5%	1.5%	1.4%
100+ units	-	2.8%	-4.7%
All City w/o Core	1.4%	2.5%	2.1%
11-19 units	1.7%	4.5%	3.8%
20-99 units	2.8%	2.4%	2.5%
100+ units	-0.5%	0.6%	-0.2%

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.

# 13. Longitudinal Income and Expense Study, Change in Rent and Net Operating Income by Community District (2016-2017)

CD	Neighborhood	Rent Change	NOI Change
Manhattan 102 103 104 105 106 107 108 109 110 111	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	2.0% 2.3% 2.9% 4.2% 1.2% 1.6% 1.6% 2.9% 6.0% 4.3% 3.8%	-1.8% -1.4% -0.8% 5.8% -4.6% -5.7% -1.7% 1.0% 18.4% 2.4%
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	2.6% 0.6% 2.1% 3.2% 3.2% 3.9% 2.7% 4.1% 4.0% 3.0% 3.3% 3.5%	10.7% 9.2% 1.3% 3.2% 0.9% -2.0% 2.0% 4.8% 6.8% -4.8% 5.9% 7.2%
Brooklyn 301 302 303 305 306 307 308 309 310 311 312 313 314 315 316 317 318	Williamsburg/Greenpoint Brooklyn Hts./Fort Greene Bedford Stuyvesant 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	4.0% 5.0% 5.6% 5.1% 5.8% 3.6% 5.0% 5.0% 3.5% 4.2% 4.4% 3.5% 5.4% 4.8% 2.2%	3.3% 3.2% 15.6% 2.2% 3.7% -2.1% 6.0% 4.7% -0.5% -2.2% 1.3% -0.2% 2.5% 0.5% -1.7% 3.5% 8.8%
Queens 401 402 403 404 405 406 407 408 409 411 412 414	Astoria Sunnyside/Woodside Jackson Hts. Elmhurst/Corona Middle Village/Ridgewood Forest Hills/Rego Park Flushing/Whitestone Hillcrest/Fresh Meadows Kew Gardens/Woodhaven Bayside/Little Neck Jamaica Rockaways	3.8% 3.8% 2.4% 2.7% 2.0% 3.3% 2.9% 3.2% 4.1% 3.6% 3.4% 7.0%	3.4% 4.2% -1.1% -1.9% -3.8% -3.9% 0.2% -1.3% 4.9% 8.1% 2.9% 16.8%
Staten Island 501	North Shore	2.9%	1.8%

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 2016 & 2017, by Building Size and Location

	Post-46		Pre-	47	А	All		
	Bldgs.	<u>DUs</u>	Bldgs.	<u>DUs</u>	Bldgs.	<u>DUs</u>		
Citywide 11-19 units 20-99 units 100+ units	<b>1,788</b> 128 1,096 564	<b>183,041</b> 1,880 63,192 117,969	<b>12,544</b> 3,293 8,893 358	<b>469,937</b> 49,898 356,417 63,622	<b>14,332</b> 3,421 9,989 922	<b>652,978</b> 51,778 419,609 181,591		
Bronx	367	28,134	2,784	122,067	3,151	150,201		
11-19 units	15	234	309	4,680	324	4,914		
20-99 units	286	16,755	2,399	106,777	2,685	123,532		
100+ units	66	11,145	76	10,610	142	21,755		
Brooklyn	370	36,787	2,997	110,242	3,367	147,029		
11-19 units	21	310	814	12,264	835	12,574		
20-99 units	240	15,321	2,116	90,061	2,356	105,382		
100+ units	109	21,156	67	7,917	176	29,073		
Manhattan	406	55,476	5,401	183,423	5,807	238,899		
11-19 units	40	587	1,802	27,279	1,842	27,866		
20-99 units	188	9,572	3,449	120,452	3,637	130,024		
100+ units	178	45,317	150	35,692	328	81,009		
Queens	591	58,390	1,340	52,999	1,931	111,389		
11-19 units	46	664	361	5,569	407	6,233		
20-99 units	350	20,295	918	38,667	1,268	58,962		
100+ units	195	37,431	61	8,763	256	46,194		
St. Island	54	4,254	22	1,206	76	5,460		
11-19 units	6	85	7	106	13	191		
20-99 units	32	1,249	11	460	43	1,709		
100+ units	16	2,920	4	640	20	3,560		
Core Manhattan	321	46,569	3,384	109,004	3,705	155,573		
11-19 units	28	417	1,390	21,084	1,418	21,501		
20-99 units	140	7,117	1,890	58,830	2,030	65,947		
100+ units	153	39,035	104	29,090	257	68,125		
Upper Manhattan	85	8,907	2,017	74,419	2,102	83,326		
11-19 units	12	170	412	6,195	424	6,365		
20-99 units	48	2,455	1,559	61,622	1,607	64,077		
100+ units	25	6,282	46	6,602	71	12,884		

Note: DU = Dwelling Unit