

## Income

 and Expense Study
## April 4, 2019

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## New York City Rent Guidelines Board

## New York City Rent Guidelines Board 2019 Income and Expense Study

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| 04 | RPIE Study | 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 |
| 13 | Longitudinal Study | Income has increased. Rental income increased an average of 3.0\% from 2016-2017. |
| 16 | Summary | Total income increased an average of 3.0\% from 2016-2017. |
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## 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 ${ }^{1}$

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). ${ }^{2}$ At the borough level, the average monthly rents in stabilized buildings were $\$ 1,850$ in Manhattan ( $\$ 2,247$ in Core Manhattan ${ }^{3}$ 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
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. ${ }^{4}$ 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. ${ }^{5}$

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). ${ }^{6}$

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 |


| $1990-91$ | $3.4 \%$ | $4.1 \%$ | $4.1 \%$ |
| :--- | :--- | :--- | :--- |
| $1991-92$ | $3.5 \%$ | $3.0 \%$ | $3.7 \%$ |
| $1992-93$ | $3.8 \%$ | $3.0 \%$ | $3.1 \%$ |
| $1993-94$ | $4.5 \%$ | $2.4 \%$ | $2.9 \%$ |
| $1994-95$ | $4.3 \%$ | $3.1 \%$ | $3.1 \%$ |
| $1995-96$ | $4.1 \%$ | $4.1 \%$ | $4.5 \%$ |
| $1996-97$ | $5.4 \%$ | $4.6 \%$ | $5.2 \%$ |
| $1997-98$ | $5.5 \%$ | $3.3 \%$ | $3.7 \%$ |
| $1998-99$ | $5.5 \%$ | $3.7 \%$ | $3.8 \%$ |
| $1999-00$ | $6.2 \%$ | $4.4 \%$ | $4.2 \%$ |
| $2000-01$ | $4.9 \%$ | $5.3 \%$ | $5.0 \%$ |
| $2001-02$ | $4.0 \%$ | $4.4 \%$ | $4.5 \%$ |
| $2002-03$ | $3.6 \%$ | $6.9 \%$ | $4.1 \%$ |
| $2003-04 \ddagger$ | - | $1.6 \%$ | $5.5 \%$ |
| $2004-05$ | $4.6 \%$ | $5.8 \%$ | $4.6 \%$ |
| $2005-06$ | $5.6 \%$ | $7.2 \%$ | $4.3 \%$ |
| $2006-07$ | $6.5 \%$ | $6.0 \%$ | $4.2 \%$ |
| $2007-08$ | $5.8 \%$ | $5.9 \%$ | $4.7 \%$ |
| $2008-09$ | $1.4 \%$ | $5.4 \%$ | $7.5 \%$ |
| $2009-10$ | $0.7 \%$ | $5.4 \%$ | $5.2 \%$ |
| $2010-11$ | $4.4 \%$ | $5.7 \%$ | $3.7 \%$ |
| $2011-12$ | $5.0 \%$ | $5.8 \%$ | $4.4 \%$ |
| $2012-13$ | $4.5 \%$ | $5.4 \%$ | $4.1 \%$ |
| $2013-14$ | $4.8 \%$ | $5.1 \%$ | $4.1 \%$ |
| $2014-15$ | $4.4 \%$ | $4.5 \%$ | $2.2 \%$ |
| $2015-16$ | $3.1 \%$ | $4.0 \%$ | $1.6 \%$ |
| $2016-17$ | $3.0 \%$ | $3.9 \%$ | $2.0 \%$ |

1990 to
$2017^{*} \ddagger$$\quad 200.3 \% \quad 229.5 \% \quad 174.3 \%$
$\emptyset$ See endnote 6 § See endnote 7
$\ddagger$ See endnote 8

* Not adjusted for inflation

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\%; RPIE collected rents increased 200.3\%; and the RGB Rent Index increased $174.3 \%$ (figures not adjusted for inflation). ${ }^{8}$

## 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.

## 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 generate less revenue than stabilized properties with commercial space, operating expenses in these buildings tend to be lower on average than in buildings with a mixture of uses. In 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, NO 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 "residentialonly" 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-toIncome 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 AuditAdjusted 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)

net operating income). Adjusting NOl 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. ${ }^{9}$

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, inflationadjusted 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 $\mathrm{NOI} /$ 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. ${ }^{10}$

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

## Change in Rent by <br> Community District, 2016-17

Rents Increase in All Community Districts


## 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
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\%.
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

In 2017, PIOC Costs Grew More Than Owner-Reported RPIE Expenses

*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. ${ }^{11}$

## 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 eighttenths 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 twothirds 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, average rent 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\% |

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 this 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

1. 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.
2. Pre-war buildings refer to those built before 1947; post-war buildings refer to those built after 1946.
3. 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.
6. 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-toDecember 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\%.
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 | Labor | Fuel | Water/Sewer | Light \& Power | Maint. | Admin. | Insurance | Misc. | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Citywide | \$279 | \$86 | \$74 | \$74 | \$24 | \$173 | \$140 | \$52 | \$42 | \$944 |
| 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.

Source: NYC Department of Finance, RPIE Filings

## 2. Average Operating \& Maintenance Cost in 2017 per Apartment per Month by Building Size and Location, Structures Built After 1946

|  | Taxes | Labor | Fuel | Water/Sewer | Light \& Power | Maint. | Admin. | Insurance | Misc. | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Citywide | \$319 | \$154 | \$54 | \$63 | \$34 | \$177 | \$170 | \$43 | \$60 | \$1,075 |
| 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 | \$143 | \$98 | \$67 | \$75 | \$37 | \$149 | \$133 | \$45 | \$23 | \$771 |
| 11-19 units | - | - | - | - | - | - | - | - | - | - |
| 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 | \$295 | \$183 | \$57 | \$57 | \$46 | \$205 | \$199 | \$41 | \$15 | \$1,099 |
| 11-19 units | - | - | - | - | - | - | - | - | - | - |
| 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.

Source: NYC Department of Finance, RPIE Filings

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

|  | Post-46 |  |  | Pre-47 |  |  | All |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rent | Income | Costs | Rent | Income | Costs | Rent | Income | Costs |
| Citywide | \$1,534 | \$1,716 | \$1,075 | \$1,273 | \$1,440 | \$944 | \$1,353 | \$1,524 | \$984 |
| 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 | \$1,031 | \$1,135 | \$759 | - | - | - | \$1,046 | \$1,141 | \$768 |
| 11-19 units | - | - | - | - | - | - | - | - | - |
| 20-99 units | \$1,008 | \$1,065 | \$706 | - | - | - | \$1,034 | \$1,092 | \$732 |
| 100+ units | - | - | - | - | - | - | - | - | - |
| 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.

Source: NYC Department of Finance, RPIE Filings

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

|  | Post-46 |  |  | Pre-47 |  |  | All |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rent | Income | Costs | Rent | Income | Costs | Rent | Income | Costs |
| Citywide | \$1,290 | \$1,379 | \$891 | \$1,196 | \$1,297 | \$867 | \$1,208 | \$1,309 | \$870 |
| 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 | \$1,056 | \$1,144 | \$737 | - | - | - | \$1,080 | \$1,153 | \$738 |
| 11-19 units | - | - | - | - | - | - | - | - | - |
| 20-99 units | \$1,068 | \$1,092 | \$706 | - | - | - | \$1,089 | \$1,099 | \$711 |
| 100+ units | - | - | - | - | - | - | - | - | - |
| 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 |

[^0]Source: NYC Department of Finance, RPIE Filings

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

|  | Post-46 | Pre-47 | All |
| :---: | :---: | :---: | :---: |
| Citywide | \$641 | \$496 | \$540 |
| 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 | \$376 | - | \$373 |
| 11-19 units | - | - | - |
| 20-99 units | \$295 | - | \$360 |
| 100+ units | - | - | - |


|  | Post-46 |  | Pre-47 | All |
| :--- | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| 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 <br> $11-19$ units | $\$ 759$ |  | $\$ 490$ | $\$ 525$ |
| $20-99$ units | $\$ 626$ | $\$ 544$ | $\$ 549$ |  |
| $100+$ units | - | $\$ 549$ | $\$ 482$ |  |
|  |  |  |  |  |
| City w/o Core <br> $11-19$ units | $\$ 511$ | $\$ 428$ | $\$ 453$ |  |
| $20-99$ units | $\$ 693$ | $\$ 419$ | $\$ 470$ |  |
| $100+$ units | $\$ 517$ | $\$ 421$ | $\$ 436$ |  |

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

|  | Taxes | Maint. | Labor | Admin. | Utilities | Fuel | Misc. | Insurance | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pre-47 | 29.5\% | 18.4\% | 9.1\% | 14.9\% | 10.4\% | 7.8\% | 4.5\% | 5.6\% | 100\% |
| 11-19 units | 32.8\% | 17.1\% | 7.7\% | 14.7\% | 9.4\% | 7.6\% | 5.5\% | 5.3\% | 100\% |
| 20-99 units | 27.9\% | 19.1\% | 8.3\% | 14.9\% | 11.0\% | 8.3\% | 4.5\% | 5.9\% | 100\% |
| 100+ units | 35.5\% | 15.3\% | 16.1\% | 15.0\% | 7.5\% | 4.4\% | 2.7\% | 3.6\% | 100\% |
| Post-46 | 29.7\% | 16.4\% | 14.3\% | 15.8\% | 9.0\% | 5.1\% | 5.6\% | 4.0\% | 100\% |
| 11-19 units | 24.6\% | 20.1\% | 9.3\% | 15.9\% | 11.9\% | 6.5\% | 5.9\% | 5.9\% | 100\% |
| 20-99 units | 27.3\% | 18.6\% | 10.8\% | 16.2\% | 10.7\% | 6.3\% | 5.0\% | 5.1\% | 100\% |
| 100+ units | 31.9\% | 14.6\% | 17.3\% | 15.5\% | 7.6\% | 4.1\% | 5.9\% | 3.1\% | 100\% |
| All Bldgs. | 29.6\% | 17.7\% | 10.8\% | 15.2\% | 9.9\% | 6.9\% | 4.8\% | 5.0\% | 100\% |
| 11-19 units | 31.8\% | 17.5\% | 7.9\% | 14.8\% | 9.7\% | 7.5\% | 5.6\% | 5.3\% | 100\% |
| 20-99 units | 27.8\% | 19.0\% | 8.9\% | 15.2\% | 10.9\% | 7.9\% | 4.6\% | 5.7\% | 100\% |
| 100+ units | 32.9\% | 14.8\% | 16.9\% | 15.4\% | 7.6\% | 4.2\% | 5.0\% | 3.3\% | 100\% |

Source: NYC Department of Finance, RPIE Filings

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

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

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 | 10\% | 20\% | 30\% | 40\% | 50\% | 60\% | 70\% | 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 |

Source: NYC Department of Finance, RPIE Filings

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

|  | Post-46 |  | Pre-47 |  | All |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bldgs. | DUs | Bldgs. | DUs | Bldgs. | DUs |
| Citywide | 1,942 | 195,557 | 13,453 | 498,928 | 15,395 | 694,485 |
| 11-19 units | 157 | 2,322 | 3,603 | 54,451 | 3,760 | 56,773 |
| 20-99 units | 1,186 | 67,594 | 9,475 | 377,176 | 10,661 | 444,770 |
| 100+ units | 599 | 125,641 | 375 | 67,301 | 974 | 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 = |  |  |  |  |  |  |

Source: NYC Department of Finance, RPIE Filings

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

|  |  |  |  |  |  |  |  |
| :--- | :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Post-46 |  |  | Pre-47 |  |  |

[^1]Source: NYC Department of Finance, RPIE Filings

## 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 | Costs | Rent | Income | Costs | Rent | Income | Costs |
| Citywide | 2.4\% | 3.2\% | 3.9\% | 3.4\% | 4.0\% | 4.4\% | 3.3\% | 4.0\% | 4.3\% |
| 11-19 units | 3.7\% | 2.6\% | 6.1\% | 4.9\% | 2.9\% | 4.7\% | 5.0\% | 3.0\% | 4.8\% |
| 20-99 units | 1.6\% | 2.4\% | 3.2\% | 3.5\% | 3.8\% | 4.4\% | 3.2\% | 3.6\% | 4.1\% |
| 100+ units | 4.2\% | 3.7\% | 3.0\% | 3.4\% | 2.2\% | 4.3\% | 2.6\% | 3.0\% | 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 | 3.2\% | 3.9\% | 3.5\% | 3.7\% | 4.2\% | 4.9\% | 3.5\% | 3.8\% | 4.9\% |
| 11-19 units | 5.2\% | 2.5\% | 4.5\% | 3.2\% | 4.6\% | 5.5\% | 2.7\% | 4.1\% | 5.4\% |
| 20-99 units | 2.5\% | 3.4\% | 3.8\% | 3.7\% | 3.9\% | 4.6\% | 3.5\% | 3.6\% | 5.2\% |
| 100+ units | 2.7\% | 3.2\% | 4.1\% | 3.3\% | 4.0\% | 4.6\% | 3.3\% | 2.8\% | 3.0\% |
| Staten Island | 5.9\% | 2.3\% | 3.1\% | - | - | - | 6.9\% | 1.7\% | 3.3\% |
| 11-19 units | - | - | - | - | - | - | - | - | - |
| 20-99 units | - | - | - | - | - | - | 7.0\% | 8.3\% | 2.6\% |
| 100+ units | - | - | - | - | - | - | - | - | - |
| 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.

Source: NYC Department of Finance, RPIE Filings

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

|  | Post-46 |  |  |
| :--- | :---: | :---: | :---: |
|  |  |  | Pre-47 |
| Citywide |  | All |  |
| 11-19 units | $\mathbf{0 . 1 \%}$ | $\mathbf{0 . 6 \%}$ | $\mathbf{0 . 4 \%}$ |
| $20-99$ units | $1.9 \%$ | $1.1 \%$ | $1.2 \%$ |
| $100+$ units | $2.6 \%$ | $1.5 \%$ | $1.8 \%$ |
| Bronx | $-1.8 \%$ | $-5.0 \%$ | $-2.7 \%$ |
| $11-19$ units |  |  |  |
| $20-99$ units | - | $3.2 \%$ | $2.9 \%$ |
| $100+$ units | $0.0 \%$ | $3.8 \%$ | $4.7 \%$ |
|  | $5.8 \%$ | $3.4 \%$ | $2.5 \%$ |
| Brooklyn |  |  | $5.2 \%$ |
| $11-19$ units | $4.0 \%$ | $2.1 \%$ | $2.7 \%$ |
| $20-99$ units | - | $2.5 \%$ | $2.9 \%$ |
| $100+$ units | $4.1 \%$ | $2.4 \%$ | $2.9 \%$ |
|  | $3.6 \%$ | $-0.8 \%$ | $1.8 \%$ |
| 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 | $1.6 \%$ | - |  |
| $11-19$ units | - | - | $1.5 \%$ |
| $20-99$ units | - | - | - |
| $100+$ units | - | - | $3.8 \%$ |


|  | Post-46 | Pre-47 | All |  |
| :--- | :---: | :---: | :---: | :---: |
|  |  |  | $-3.1 \%$ |  |
| Core Manhattan | $-2.4 \%$ | $-3.6 \%$ | $-3.8 \%$ |  |
| $11-19$ units | - | $-3.0 \%$ | $-2.8 \%$ | $-1.4 \%$ |
| $20-99$ units | $0.6 \%$ | $-1.1 \%$ |  |  |
| $100+$ 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 Post46 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.

Source: NYC Department of Finance, RPIE Filings

## 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 | Greenwich Village | 2.0\% | -1.8\% |
| 103 | Lower East Side/Chinatown | 2.3\% | -1.4\% |
| 104 | Chelsea/Clinton | 2.9\% | -0.8\% |
| 105 | Midtown | 4.2\% | 5.8\% |
| 106 | Stuyvesant Town/Turtle Bay | 1.2\% | -4.6\% |
| 107 | Upper West Side | 1.6\% | -5.7\% |
| 108 | Upper East Side | 1.6\% | -1.7\% |
| 109 | Morningside Hts./Hamilton Hts. | 2.9\% | 1.0\% |
| 110 | Central Harlem | 6.0\% | 18.4\% |
| 111 | East Harlem | 4.3\% | 2.4\% |
| 112 | Washington Hts./Inwood | 3.8\% | 2.0\% |
| Bronx |  |  |  |
| 201 | Mott Haven/Port Morris | 2.6\% | 10.7\% |
| 202 | Hunts Point/Longwood | 0.6\% | 9.2\% |
| 203 | Morrisania/Melrose/Claremont | 2.1\% | 1.3\% |
| 204 | Highbridge/S. Concourse | 3.2\% | 3.2\% |
| 205 | University Heights/Fordham | 3.2\% | 0.9\% |
| 206 | E. Tremont/Belmont | 3.9\% | -2.0\% |
| 207 | Kingsbridge Hts./Mosholu/Norwood | 2.7\% | 2.0\% |
| 208 | Riverdale/Kingsbridge | 4.1\% | 4.8\% |
| 209 | Soundview/Parkchester | 4.0\% | 6.8\% |
| 210 | Throgs Neck/Co-op City | 3.0\% | -4.8\% |
| 211 | Pelham Parkway | 3.3\% | 5.9\% |
| 212 | Williamsbridge/Baychester | 3.5\% | 7.2\% |
| Brooklyn |  |  |  |
| 301 | Williamsburg/Greenpoint | 4.0\% | 3.3\% |
| 302 | Brooklyn Hts./Fort Greene | 5.0\% | 3.2\% |
| 303 | Bedford Stuyvesant | 5.6\% | 15.6\% |
| 305 | East New York/Starett City | 5.1\% | 2.2\% |
| 306 | Park Slope/Carroll Gardens | 5.8\% | 3.7\% |
| 307 | Sunset Park | 3.6\% | -2.1\% |
| 308 | North Crown Hts./Prospect Hts. | 5.0\% | 6.0\% |
| 309 | South Crown Hts. | 5.0\% | 4.7\% |
| 310 | Bay Ridge | 3.5\% | -0.5\% |
| 311 | Bensonhurst | 2.2\% | -2.2\% |
| 312 | Borough Park | 3.5\% | 1.3\% |
| 313 | Coney Island | 4.2\% | -0.2\% |
| 314 | Flatbush | 4.4\% | 2.5\% |
| 315 | Sheepshead Bay/Gravesend | 3.5\% | 0.5\% |
| 316 | Brownsville/Ocean Hill | 5.4\% | -1.7\% |
| 317 | East Flatbush | 4.8\% | 3.5\% |
| 318 | Flatlands/Canarsie | 2.2\% | 8.8\% |
| Queens |  |  |  |
| 401 | Astoria | 3.8\% | 3.4\% |
| 402 | Sunnyside/Woodside | 3.8\% | 4.2\% |
| 403 | Jackson Hts. | 2.4\% | -1.1\% |
| 404 | Elmhurst/Corona | 2.7\% | -1.9\% |
| 405 | Middle Village/Ridgewood | 2.0\% | -3.8\% |
| 406 | Forest Hills/Rego Park | 3.3\% | -3.9\% |
| 407 | Flushing/Whitestone | 2.9\% | 0.2\% |
| 408 | Hillcrest/Fresh Meadows | 3.2\% | -1.3\% |
| 409 | Kew Gardens/Woodhaven | 4.1\% | 4.9\% |
| 411 | Bayside/Little Neck | 3.6\% | 8.1\% |
| 412 | Jamaica | 3.4\% | 2.9\% |
| 414 | Rockaways | 7.0\% | 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 |  |  | All |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bldgs. | DUs | Bldgs. | DUs | Bldgs. | DUs |
|  |  |  |  |  |  |  |

Note: DU = Dwelling Unit
Source: NYC Department of Finance, RPIE Filings


[^0]:    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.

[^1]:    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 1119 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.

