Housing NYC









Chair

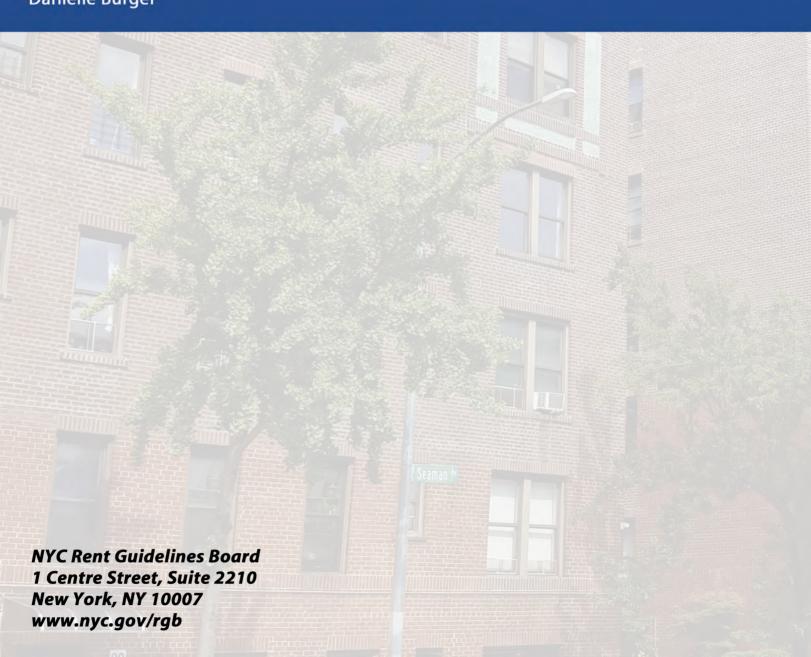
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Housing NYC: Rents, Markets & Trends 2018

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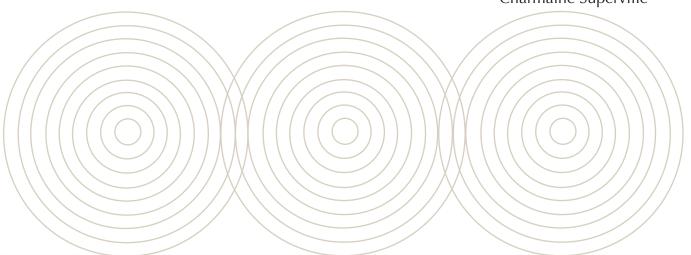


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Chair's Acknowledgements

New York City continues to experience vacancy levels (3.63% Citywide for all rentals and 2.06% for rent stabilized units, according to the most recent data) that constitute a "housing emergency," requiring the Rent Guidelines Board (RGB), rather than the market, to set annual renewal lease adjustments for nearly one million rent stabilized apartments, lofts and hotel units. Our role is to determine lease adjustments that are responsive to the costs of operating rental housing, but also cognizant of the economic conditions faced by tenants.

In determining the renewal lease adjustment rates for 2018, we followed the long-established practice of prior Boards of relying upon the carefully gathered data provided by the RGB staff and data contained in the 2017 Housing and Vacancy Survey. The reports in this edition of Housing NYC: Rents, Markets and Trends 2018 provide the foundation for the Board's deliberations and our decisions this year.

Every member of the Board is grateful to the RGB staff for their hard work, careful analysis, and clear presentation of data. This staff conducts impeccable research that is invaluable to the Board, as well as to the many people and organizations who participate in the public discussion. These reports provide a thorough analysis of the New York City housing market and the larger economy, including a broad array of data concerning the costs of operating residential buildings; owner income; housing availability; tenant income; and changes to the housing stock.

This book is critical not only for those who are interested in the Board's decisions for a particular year, but is also part of a series of books produced by the RGB staff that provide a rich data set and analysis for use by housing professionals, government officials, housing advocates, academics, and all members of the public who care about the quality and affordability of New York City's rental housing.

Our decision was rooted in the data compiled in this book, but the Board also relied upon the hundreds of people who testified at this year's public hearings for the human faces and individual stories they shared. We are grateful for the perspectives offered by elected officials, representatives of tenant and owner groups, public policy organizations, and the many members of the public for their insights into the challenges faced by both tenants and owners of rent stabilized apartments.

It is a great honor and privilege to be part of this Board. We are given a weighty task and each member of the Board has demonstrated exceptional dedication to the process and commitment to careful and thoughtful decision making. I thank each member of the Board for their participation in a critically important endeavor.

Kathleen A. Roberts Chair of the Board

Executive Director's Acknowledgements

Each year, the Rent Guidelines Board (RGB) releases a compendium of research reports produced by the research staff to aid the Board in setting renewal lease adjustments for nearly one million rent stabilized housing units in New York City. Although these reports are produced for the Board, many government agencies, housing professionals and the public at large have come to rely on this data as a valuable source of information that reflects the state of the NYC rent stabilized housing stock. We hope that you find the information contained in *Housing NYC: Rents, Markets and Trends 2018* a useful tool in understanding the complex issues surrounding the NYC rental housing market.

The research contained within these pages could not be possible without the expertise of the RGB research staff. Our Research Director, Brian Hoberman, authored the 2018 Income and Expense Study, 2018 Mortgage Survey Report and Changes to the Rent Stabilized Housing Stock in New York City in 2017. Deputy Research Director Danielle Burger penned the 2018 Income and Affordability Study and the 2018 Housing Supply Report and contributed to the 2018 Price Index of Operating Costs. The outstanding efforts of these two seasoned and talented professionals are much appreciated. Through their hard work and dedication to the accuracy of the data released in our reports, they have helped to maintain the integrity of the work produced by our office. It is my pleasure to work with both of them.

The *Price Index of Operating Costs (PIOC)* is the Board's most time-intensive report. Many exhaustive and tedious hours are spent collecting data regarding the operating and maintenance costs incurred by owners of rent stabilized buildings. Every member of the staff spends time working on the PIOC. However, this Index would not be possible without our team of temporary survey personnel who collect prices for insurance, non-union labor, contractors, building supplies, and replacement items. My thanks go out to our team of data collectors: Michael Taylor and Savana Hilaire. Lastly, I would like to thank James Hudson for his meticulous review of the PIOC and his work in updating the PIOC weights. His vast knowledge of the Price Index and his statistical expertise ensure that the numbers presented to the Board are accurate.

Although the reports contained in Housing NYC are written and compiled by our research team, our efforts would not be possible without the RGB's Office Manager/Public Information Officer, Charmaine Superville. With kindness and care, she answers thousands of phone calls each year, answering a myriad of housing questions. She also works on the PIOC, helping to collect data from owners, managing agents and fuel companies. In addition, she helps to organize the Board's public meetings and hearings and is responsible for balancing the Board's books and paying our bills.

I would like to take this opportunity to acknowledge the efforts of the members of the Rent Guidelines Board, all of whom are charged with a difficult job. They are a dedicated and hard-working group, bringing a strong sense of civic duty to their task. In particular, I'd like to thank Chair Kathleen Roberts for her continued support of the RGB staff and its executive director. Her insight and fresh approach to the Board's mandate is much appreciated.

Although RGB reports are produced entirely "in-house," our research efforts would not be possible without assistance from many others. For both the information and expertise they provided, our gratitude goes out to: Bill Sears at the Department of City Planning, for data on new housing completions; Farid Heydarpour at the NYC Comptroller's Office, who provides labor force data; Floralba Paulino at the Bureau of City Marshals, for information on evictions and possessions; Eddy Valdez and Karen Kane at the NYC Civil Court, for data on housing court proceedings; Michael Bobick, Esq. at the NYC Loft Board, for data concerning loft conversions to rent stabilization; Jackie Bray at the Department of Homeless Services, for help with homeless statistics; Emre Edev at the City Council's Finance Division for tax levy data; Aditi Sen of the Mayor's Office of Special Enforcement for illegal hotel violations data; and Yaw Owusu-Ansah of the Independent Budget Office (IBO), for lending his expertise on real estate tax projections. At the Division of Housing and Community Renewal (DHCR), which is a division of New York State Homes and Community Renewal (HCR), we would like to thank Deputy Commissioner Woody Pascal, as well as Michael Berrios and Tracey

Stock, for their assistance and expertise regarding owner registration data and Mohammed Siddiqui for his assistance with Mitchell-Lama data. In addition, our thanks goes out to the following staff members of the NYC Department of Housing Preservation and Development (HPD): Elyzabeth Gaumer, Assistant Commissioner of Research and Evaluation, for facilitating the collection of additional City-sponsored housing construction and sales data; Meilan Chiu of the Tax Incentives Program, who provided data on tax benefit programs; and Julie Walpert, Assistant Commissioner, Office of Housing Operations, who provides information regarding Mitchell-Lama units. We would like to thank the staff of NYC Department of Finance, in particular, John Blaskovich and Andreen McDonald, for providing summary data from the Real Property Income and Expense (RPIE) filings.

Our appreciation is extended to the numerous agencies that provided useful data throughout the year. At the national level: the U.S. Census Bureau, Residential Construction branch; the Bureau of Labor Statistics; the Federal Deposit Insurance Corporation; U.S. Bankruptcy Court; and the Department of Housing and Urban Development. Agencies at the state level include: the Real Estate Financing Bureau of the Attorney General's Office; New York State Homes and Community Renewal, the Division of Housing and Community Renewal; the Bureau of Data Management and Analysis of the Office of Temporary and Disability Assistance; and the Department of Labor's Research and Statistics Division. Local level sources include: Civil Court of the City of New York; the Department of Finance; the Department of Buildings; the Department of City Planning; the Department of Homeless Services; the Human Resources Administration; the Comptroller's Office; the Bureau of City Marshals; the NYC Loft Board; the Office of the Mayor; and the Department of Housing Preservation and Development.

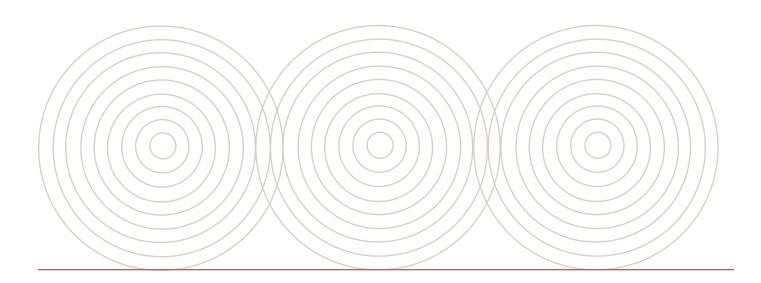
Over the years, we have maintained a strong partnership with HPD. We would like to thank Commissioner Maria Torres-Springer, Elyzabeth Gaumer, and Sheree West for continuing and strengthening this relationship. We are fortunate to have such a dedicated and responsive group meeting the needs of the Board and its staff.

Finally, we give special thanks to those who testified at RGB meetings this year: from NYC Department of Finance, Timothy Sheares, Deputy Commissioner, Property Division; from HPD, Elyzabeth Gaumer, Assistant Commissioner, Research and Evaluation; and from HCR, Woody Pascal, Deputy Commissioner for Rent Administration.

Andrew McLaughlin Executive Director

Income & Expense

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What's New

- ◆ The Price Index of Operating Costs (PIOC) for Rent Stabilized Apartment Buildings increased 4.5% this year.
- All costs in natural-gas heated buildings increased 4.4% and all costs in fuel-oil heated buildings increased 5.1%.
- ◆ The "Core" PIOC, which excludes the changes in fuel oil prices, natural gas, and steam costs, is useful for analyzing inflationary trends. The Core PIOC rose by 3.7% this year.
- Fuel costs increased 16.4%, the highest increase of any PIOC component.
- Real estate taxes increased 6.3%, primarily due to a rise in assessments for Class Two properties.
- The Utilities component increased by 0.5%, primarily due to an increase in electricity costs.
- ◆ The Price Index of Operating Costs for Rent Stabilized Apartment Buildings is projected to increase 3.4% next year.

Introduction

The *Price Index of Operating Costs* (PIOC) measures changes in the cost of purchasing a specified set of goods and services (market basket) used in the operation and maintenance of rent stabilized apartment buildings in New York City. The PIOC consists of seven cost components: Taxes, Labor Costs, Fuel, Utilities, Maintenance, Administrative Costs and Insurance Costs. The specific goods and services (items) within each component were originally selected based on a study of 1969 expenditure patterns by owners of rent stabilized apartment buildings. The specific items included in each component have changed over time in order to reflect changes in owner expenditure patterns. The methodology for determining the costs for each component is described in the final section of this report. The measured price changes (price relatives) in each index component are presented in Appendix B.2. The relative importance of each index component as a percentage of total operating and maintenance

The Price Index of Operating Costs for Rent Stabilized Apartment Buildings rose ...



expenditures is shown by its "expenditure weight" (see Appendix B.2). The 2017-2018 price changes and expenditure weights are then combined to provide the overall change in the PIOC for 2017-2018.¹

Changes in the overall

PIOC result from changes in the prices of individual goods and services, each weighted by its relative importance as a percentage of total operating and maintenance (O&M) expenditures. Because the market basket is fixed in the sense that the quantities of goods and services of each kind remain constant, the relative importance of the various goods and services will change when their prices increase either more quickly or more slowly than average. Thus, the relative importance, or weight, attached to each good or service changes from year to year to reflect the different rates of price change among the various index items.

Overview

This year, the PIOC for all rent stabilized apartment buildings increased by 4.5%. Increases occurred in all PIOC components. The largest proportional increase was seen in Fuel (16.4%), followed by Taxes (6.3%). More moderate increases occurred in Maintenance (3.4%), Insurance Costs (3.3%), Labor Costs (3.2%), Administrative Costs (1.6%), and Utilities (0.5%). The growth in the Consumer Price Index (CPI), which measures inflation in a wide range of consumer goods and services, during this same time period was lower than the

Apartments

Change In Costs for Rent Stabilized Apartment Buildings, March 2017 to March 2018

All Costs	4.5%
Insurance Costs	3.3%
Administrative Costs	1.6%
Maintenance	3.4%
Utilities	0.5%
Fuel	16.4%
Labor Costs	3.2%
Taxes	6.3%

Terms and Definitions

Price Index - the measure of price change in a market basket of goods and services.

Component - categories of goods and services, such as Labor Costs or Taxes, that comprise the market basket of a price index.

Item - representative individual goods and services within a component, such as Pushbroom, Plumbing, Faucet or Roof Repair.

Price Relative - the change of current and prior year's prices.

Expenditure Weight - the relative importance of the change in costs of different goods and services.

Specification - defined pricing units with specific terms of sale, such as cash, volume or trade discounts.

PIOC, rising 1.8%.² See the table on this page and Appendix B.2 for changes in costs and prices for all rent stabilized apartment buildings from 2017-2018.

The "Core" PIOC, which excludes changes in fuel oil, natural gas, and steam costs used for heating buildings, is useful for analyzing long-term inflationary trends. The Core PIOC rose by 3.7% this year and was lower than the overall PIOC due to the exclusion of costs in the Fuel component, which rose 16.4%.

Price Index Components

Taxes



The Taxes component of the PIOC is based entirely on real estate taxes and accounts for nearly 30% of the overall price index. The change in tax cost is estimated by comparing aggregate taxes levied on rent stabilized apartment buildings in Fiscal Year (FY) 2017 and

FY 2018. Aggregate real estate taxes rose this year by 6.3%. The growth in taxes was primarily due to a 9.0% rise in assessments. The rise in assessments was offset by a rise in the total value of exemptions, which had the effect of lowering the total rise in taxes by 1.0%. In addition, a decline in the tax rate for Class 2 buildings of 1.3% also helped to offset the rise in assessments. Change in tax abatements had little impact on the change in Taxes for 2018.

Tax Levy — The total tax levy for all properties in the City (commercial and residential) increased by 7.5% from FY 2017 to FY 2018. The large majority of rent stabilized apartments are contained in multi-family buildings that are in Tax Class Two. The total Class Two property levy rose at a faster pace than that of the City as a whole, at a rate of 8.0%. The distribution of the levy among property classes tends to shift from year to year. From FY 2017 to FY 2018, the levy share for Class Two properties increased by 0.2 percentage points, from 37.26% to 37.42% of the total tax burden. This is significantly higher than the 26.3% share that was established at the inception of the four-class tax system in 1983.

Tax Rate — The average annual FY 2017 Class Two tax rate of 12.892 decreased by 1.3%, resulting in a new annualized rate of 12.719 for FY 2018. This is the fourth time in the past six years that the Class Two tax rate decreased. For a historical perspective on changes in the tax rate, abatements, and exemptions, see the blue bars on the graph on the next page.

Assessments — Assessed valuations of properties containing rent stabilized units rose by 9.0% Citywide in FY 2018. Assessments rose in

all five boroughs, with Brooklyn witnessing the highest growth at 11.9%, followed by the Bronx at 9.4%, Queens at 9.1%, Staten Island at 8.1% and Manhattan at 7.8%. Buildings in Manhattan drive much of the change in assessed value Citywide. This was true in FY 2018, with 62% of the total assessed value attributed to this borough. For a historical perspective on changes in tax assessments, see the brown bars on the graph below.

Abatements and Exemptions — This year, the number of rent stabilized buildings receiving tax abatements increased by 0.14% from the previous fiscal year. In addition, the average benefit value of the typical tax abatement increased by 16.3% from FY 2017 to FY 2018. The net impact of the increase in the number of buildings receiving abatements and the increase in the average abatement value was a negligible decrease in the overall change in Taxes of just 0.2%.

In FY 2018, 0.4% fewer rent stabilized buildings benefited from tax exemptions. However, the value of

the average tax exemption increased by 6.1%. This combination of an increase in the average value of tax exemptions and the decrease in the number of buildings receiving exemptions resulted in reducing the increase in the overall change in Taxes by 1.0%. (See Appendices B.5 and B.6.)

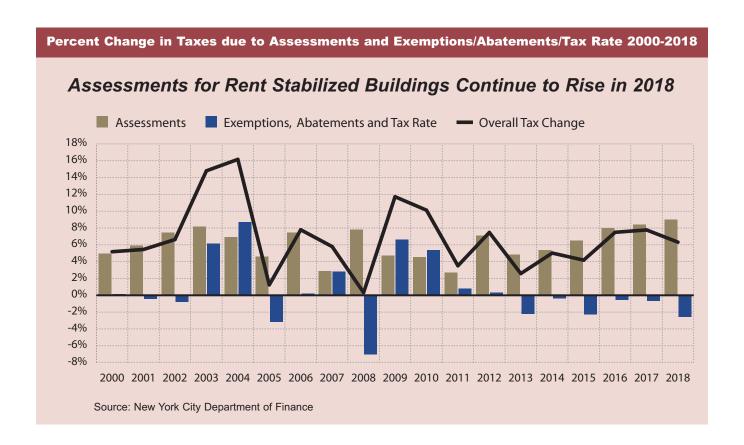
Labor Costs



The Price Index measure of Labor Costs includes union and non-union salaries and benefits, in addition to Social Security and unemployment insurance. The cost of unionized labor

makes up two-thirds of the Labor Costs component. The entire Labor Costs component comprises 16.7% of the overall Price Index.

Labor Costs rose 3.2%, 0.9 percentage points less than last year's rise of 4.1%. The rise in Labor Costs was due to increases in union and non-union wages, as well as rising costs in healthcare and pension



contributions. The decline in unemployment insurance of 12.8% had minimal impact, since it accounts for less than one-half of one percent of this component's weight.

Wages comprise three-quarters of the Labor Costs component. Non-union pay increased by 5.1%, a half percentage point lower than the increase seen in the 2017 PIOC (5.6%). Unionized wages also rose, rising by 2.7%, a larger increase than the 2.4% witnessed last year.

Health and welfare benefits, which comprises more than 21% of the Labor Costs component, increased 1.7%. See Appendix B.2 for all Labor Costs item weights and price relatives.

Fuel



The Fuel component comprises 6.4% of this year's Price Index. The change in cost measured in this component considers both the change in weather and the change in prices for heating

multifamily buildings by fuel oil, natural gas, and steam.³

This year the Fuel component increased 16.4%, following a 24.6% rise in the prior year. Natural gas costs, which account for 49% of the overall costs in this component, increased 15.4%. The cost for heating buildings by fuel oil makes up 43% of this component, and increased 19.9%. Steam costs rose 4.5%, but these costs account for only 8% of the Fuel component.4

Along with measuring price, the PIOC also takes into account the effect of weather on the demand for fuel, especially during the heating season when the large majority of fuel is burned. Since the weather this year was colder than last year, the increase in fuel cost was greater than it would have been if prices alone were considered. For instance, the increase in fuel oil costs was greater than the rise in fuel oil prices, with prices increasing 16.3%, but costs rising 19.9%. In years where the weather does not vary much from the prior year, the change in the cost of fuel oil is roughly equal to that of the change in price, such as in 2015. See the table on this page for a comparison of the past ten years of fuel oil cost relatives to fuel oil prices. See Appendix B.2 for all Fuel item weights and price relatives.

Fuel Oil Cost Relatives vs. Change in Fuel Prices, 2009-2018

PIOC	Fuel Oil Cost	Change in
<u>Year</u>	Relative*	Fuel Oil Price**
2018	19.9%	16 20/
2010	19.9%	16.3%
2017	22.1%	7.3%
2016	-45.5%	-30.9%
2015	-23.4%	-22.5%
2014	7.8%	0.3%
2013	20.0%	2.9%
2012	1.6%	20.8%
2011	23.1%	20.3%
2010	0.5%	6.7%
2009	-10.1%	-16.9%

* The Fuel Oil Cost Relative factors in the effect of weather on total fuel oil consumption. In months that are colder than the same month in the prior year, the weather factor will put upward pressure on the fuel oil relative. In months that are warmer than the same month in the prior year, downward pressure is placed on the Fuel Oil Cost Relative.

** Weighted change in #2, #4 and #6 fuel oil prices. From 2016 forward, weighted change in #2 and #4 fuel oil prices only.

Source: NYC RGB Price Indices of Operating Costs, 2009-2018

Utilities



The Utilities component consists of non-heating natural gas electricity costs, as well as water and sewer charges, and it comprises 10.3% of this year's Price Index. In

the case of the gas and electricity items, changes in costs are measured using the PIOC specifications (e.g., the quantity of electricity and gas being purchased) and the changes in rate schedules. Water and sewer costs are based on rate adjustments set by the NYC Water Board and they account for 73% of the Utilities component.

This year Utilities increased 0.5%, compared to a 0.8% decrease in the previous year. The increase in this component was driven by increases in the cost of electricity and natural gas. Electricity costs, which account for just over 26% of this component, increased by 1.5%, while gas costs, which account for less than one percent of the Utilities component, rose 10.6%. But water and sewer charges, which account for more than 73% of this component, were flat for the second

consecutive year. See Appendix B.2 for all Utilities item weights and price relatives.

Maintenance



The Maintenance component accounts for 17.9% of this year's Price Index. The Maintenance component rose 3.4%, more than last year's rise of 2.5%. Of the 29 expense items contained in this

component, just three items account for 43% of its expenditure weight: Repainting, Plumbing (faucet), and Plumbing (stoppage). This year, painters' rates rose 6.3%, more than the 2.3% recorded last year. Combined plumbing rates increased at a slower pace, rising 2.7%, less than last year's rise of 5.0%.

Other price increases of note were boiler repairs (3.0%), floor maintenance (3.2%), and roof repair (3.8%), which represent a total of six expense items and account for nearly 19% of this component. There were also rises in the two items newly added this year, Extermination and Electrician Services, which rose by 1.5% and 0.5%, respectively. These new items account for almost 12% of this component. For more information regarding new additions and subtractions of items in this component, see Maintenance in the Methodology section on page 23. See Appendix B.2 for all Maintenance item weights and price relatives.

Administrative Costs



Fees paid to management companies, accountants, and attorneys make up 87% of this component. This year, Administrative Costs rose 1.6%, 1.9 percentage points less than last year's

rise of 3.5%. Administrative Costs comprise 13.6% of the PIOC.

A large portion of the growth in the Administrative Costs component can be attributed to a rise in management company fees (0.8%) that comprise over half of this component. Management fees are often tied to apartment rental income and are affected by changes in rents and vacancies. This year's growth is less than last year's (4.1%), indicating that management companies' fees and/or rents increased at a slower

pace than last year. This lesser rise in management fees may also indicate that vacancies and/or collection losses in managed buildings increased as compared to the previous year.

Accounting fees increased in this year's PIOC by 2.6%, less than last year's rise of 3.5%. Attorney fees rose 4.5%, 0.5 percentage points more than last year's growth of 4.0%.

Communications, which accounts for about 6% of the Administrative Costs component, decreased 4.5%. See Appendix B.2 for all Administrative Costs item weights and price relatives.

Insurance Costs



For the seventh consecutive year there was an increase in the Insurance Costs component, rising 3.3%, compared to last year's increase of 8.0%. Insurance Costs account for 5.1% of the PIOC.

Changes in insurance costs for owners varied by the amount of the policy. Policies that cost more than \$6,282.97, which represent half of all verified insurance quotes, saw an increase in cost of 3.1% upon renewal. Buildings with policies that cost \$6,282.97 or less saw an increase of 4.7%. (See Appendix B.2.)

PIOC by Building Type

The 1983 Expenditure Study provided a basis for calculating separate sets of expenditure weights for different types of buildings that contain rent stabilized units. In addition to the price index for all rent stabilized apartments, the PIOC includes separate indices for buildings constructed before 1947 (pre-1947) and for buildings constructed in 1947 or later (post-1946), as well as for gas-heated and oil-heated buildings. (See Appendices B.2 and B.3.)

Typically, buildings constructed before 1947 incur a lower percentage of operating and maintenance costs for property taxes and labor costs than post-1946 buildings. However, fuel costs for heating pre-1947 buildings represent a significantly higher percentage of total operating and maintenance costs. As a result, total costs in the Pre-1947 Index rose by 4.9%, while costs in the Post-1946 Index rose by a lesser amount, 4.0%.

Hotels

Change In Costs for Rent Stabilized Hotel Buildings, March 2017 to March 2018

All Costs	3.9%
Insurance Costs	3.3%
Administrative Costs	0.3%
Maintenance	3.8%
Utilities	1.2%
Fuel	15.1%
Labor Costs	4.0%
Taxes	1.3%

Lofts

Change In Costs for Rent Stabilized Loft Buildings, March 2017 to March 2018

Taxes	6.3%
Labor Costs	3.8%
Fuel	19.6%
Utilities	0.2%
Maintenance	3.6%
Admin Costs-Legal	4.5%
Admin Costs-Other	1.0%
Insurance Costs	3.3%
All Costs	5.2%

Indices were also calculated for different types of heating systems. These heating system indices differ from the price index for all apartments because the expenditure weight for the Fuel component differs from index to index. Because the Fuel component carries more weight in oil-heated buildings versus those heated by gas, the Oil-Heated Index (5.1%) rose more than the Gas-Heated Index (4.4%).

Rent Stabilized Hotels

The Hotel Price Index includes separate indices for each of three categories of rent stabilized hotels (due to their dissimilar operating cost profiles) and a general index for all rent stabilized Hotels. The three categories of hotels are: 1) "traditional" hotels — a multiple dwelling that has amenities such as a front desk, maid or linen services; 2) Rooming Houses — a multiple dwelling other than a hotel with thirty or fewer sleeping rooms; and 3) single room occupancy hotels (SROs) — a multiple dwelling in which one or two persons reside separately and independently of other occupants in a single room.

The Price Index for all rent stabilized Hotels increased 3.9% this year, a 2.4 percentage point difference from the 6.3% rise in 2017. It is important to note that the Hotel PIOC was not reweighted using the most current Real Property Income and Expense (RPIE) data (see Endnote 1). However, in order to maintain symmetry between indices, the expense items were aligned to the seven components now used in the Apartment PIOC. The realignment of the hotel expenditure items had no impact on the change in the overall PIOC, which would have remained 3.9% if the old alignments were used.

This year there were increases in all seven of the PIOC Hotel components. The Fuel component witnessed the highest increase, rising 15.1%. The Fuel component accounts for nearly 14% of the entire Hotel Index. The remaining six components witnessed more moderate cost increases, with Labor Costs rising 4.0%, Maintenance 3.8%, Insurance Costs 3.3%, Taxes 1.3%, Utilities 1.2% and Administrative Costs 0.3%. See the table on this page for changes in costs and prices for all rent stabilized hotels from 2017-2018.

Among the different categories of Hotels, the index for "traditional" hotels increased 1.9%, Rooming Houses by 6.0%, and SROs by 5.5%. (See Appendices B.4 and B.7.)

Rent Stabilized Lofts

Similar to the Hotel Index, the Loft PIOC expenditure component weights were not reweighted using the most current RPIE data (see Endnote 1). However, the Loft expenditure items were placed into the seven components used in the Apartment PIOC, except for the Attorney Fees expense item, which has traditionally been its own, separate, expense

component. Therefore, the Loft Index has eight components. Because these items were not reweighted, just moved, the overall change in the Loft PIOC can be compared historically to past indices.

The increase in the Loft Index this year was 5.2%, 1.7 percentage points lower than the 6.9% increase in 2017. Increases in costs were seen in all eight components that make up this index. Fuel Costs witnessed the highest rise, increasing 19.6%, followed by increases in Taxes of 6.3%. More moderate increases were seen in Administrative Costs-Legal (4.5%), Labor Costs (3.8%), Maintenance (3.6%), Insurance Costs (3.3%) Administrative Costs-Other (1.0%) and Utilities (0.2%). See the table on the previous page and Appendix B.8 for changes in costs and prices for all rent stabilized lofts from 2017-2018.

The Core PIOC

The Core PIOC, which measures long-term trends by factoring out shifts in fuel costs for heating rent stabilized buildings in NYC, rose 3.7% in 2018. The rise in the 2018 Core PIOC was 0.8 percentage points lower than the both this year's Apartment Index (4.5%), and last year's Core Index (4.5%). This year's Core PIOC rose at a slower pace than the overall PIOC because fuel costs, which were not used to calculate the Core, increased 16.4%.

PIOC Projections for 2019

Section 26-510 of the Rent Stabilization Law requires the Board to consider prevailing and projected operating and maintenance costs for buildings containing rent stabilized apartments. Projections for components of the PIOC are calculated to provide the RGB with an estimate of how much costs are expected to rise in the year following the current Price Index.

Projecting changes in the PIOC has become more challenging in recent years. Energy prices — which represent roughly one-tenth of the market basket of operating costs measured in the index — have become increasingly volatile. Unpredictable geo-political events, recession and changing weather patterns are some of the forces behind large changes in fuel costs that have in turn limited the accuracy of the PIOC

Projected Change In C Stabilized Apartmen March 2018 to Ma	t Buildings,
Taxes	5.7%
Labor Costs	3.2%
Fuel	1.1%
Utilities	1.7%
Maintenance	1.8%
Administrative Costs	2.0%
Insurance Costs	5.3%

projections in recent studies. The tax component, which accounts for nearly 30% of the entire Price Index, has also become harder to project due to changes in tax policy, such as tax rate adjustments and changes to the City's tentative assessment roll, after the period covered in this Price Index.

This year, operating costs in rent stabilized apartment buildings increased by 4.5%, versus last year's projected PIOC increase of 4.4%, a difference of just 0.1 percentage points. The component with the largest deviation between actual and projected changes in costs was Fuel. Fuel cost was projected to rise 5.8%, but actually rose 16.4% in 2018. Other notable differences were found in the Insurance Costs and Utilities components. Insurance Costs, which were projected to increase by 7.8%, rose instead by 3.3%, a 4.5 percentage point difference. Utilities, which were projected to rise by 3.5%, rose instead by 0.5%, a difference of 3.0 percentage points. The remaining 2018 projected components of the PIOC were all within 1.8 percentage points of the actual measured changes.

Overall, the PIOC is expected to grow by 3.4% from 2018 to 2019. Costs are predicted to rise in each component, with the largest growth (5.7%) projected to be in Taxes, the component that carries the most weight in the Index. Other projected increases include Insurance Costs (5.3%), Labor Costs (3.2%), Administrative Costs (2.0%), Maintenance (1.8%),

Utilities (1.7%), and Fuel (1.1%). The table on the previous page shows projected changes in PIOC components for 2019. The core PIOC is projected to rise 3.5%, 0.1 percentage points more than the overall projected Apartment PIOC.

Commensurate Rent Adjustments

Throughout its history, the Rent Guidelines Board has used a formula, known as the commensurate rent adjustment, to help determine annual rent guidelines for rent stabilized apartments. In essence, the "commensurate" combines various data concerning operating costs, revenues, and inflation into a single measure to determine how much rents would have to change for net operating income (NOI) in rent stabilized buildings to remain constant. The different types of "commensurate" adjustments described below are primarily meant to provide a foundation for discussion concerning prospective guidelines.

In its simplest form, the commensurate rent adjustment is the amount of rent change needed to maintain owners' current dollar NOI at a constant level. In other words, the commensurate provides a set of one- and two-year renewal rent adjustments, or guidelines, that will compensate owners for the change in prices measured by the PIOC and keep net operating income constant.

The first commensurate method is called the "Net Revenue" approach. While this formula takes into consideration the term of leases actually signed by tenants, it does not adjust owners' NOI for inflation. The "Net Revenue" formula is presented in two ways: First, by adjusting for the mix of lease terms; and second, by adding an assumption for rent stabilized apartment turnover and the subsequent impact of revenue from vacancy increases. Under the "Net Revenue" formula, a guideline that would preserve NOI in the face of this year's 4.5% increase in the PIOC is 3.5% for a one-year lease and 6.25% for a two-year lease. Using this formula, and adding assumptions for the impact of vacancy increases on revenues when apartments experience turnover, results in guidelines of 1.75% for one-year leases and 3.0% for two-year leases.

The second commensurate method considers the mix of lease terms while adjusting NOI upward to reflect general inflation, keeping both operating and maintenance (O&M) costs and NOI constant. This is commonly called the "CPI-Adjusted NOI" formula. A guideline that would preserve NOI in the face of the 1.8% increase in the Consumer Price Index (see Endnote 3) and the 4.5% increase in the PIOC is 4.5% for a one-year lease and 7.25% for a two-year lease. Guidelines using this formula and adding the estimated impact of vacancy increases are 2.5% for one-year leases and 4.5% for two-year leases.⁵

The third commensurate method, the "traditional" commensurate adjustment, is the formula that has been in use since the inception of the Rent Guidelines Board and is the only method that relies on the PIOC projection. The "traditional" commensurate yields 2.9% for a one-year lease and 4.0% for a two-year lease. This reflects the increase in operating costs of 4.5% found in the 2018 PIOC and the projection of a 3.4% increase next year.

All of these commensurate methods have limitations. The "Net Revenue" formula does not attempt to adjust NOI based on changes in interest rates or the effect of inflation. The "CPI-Adjusted NOI" formula inflates the debt service portion of NOI, even though interest rates have been historically low over recent years. For both of these commensurate methods, including a consideration of the amount of income owners receive on vacancy assumes that turnover rates are constant across the City.

As a means of compensating for cost changes, the "traditional" commensurate rent adjustment has two major flaws. First, although the formula is designed to keep owners' current dollar income constant, the formula does not consider the mix of one- and two-year lease renewals. Since only about two-thirds of leases are renewed in any given year, with a majority of leases being renewed having a one-year duration, the formula does not necessarily accurately estimate the amount of income needed to compensate owners for O&M cost changes.

A second flaw of the "traditional" commensurate formula is that it does not consider the erosion of owners' income by inflation. By maintaining current dollar NOI at a constant level, adherence to the formula may cause profitability to decline over time. However, such degradation is not an inevitable consequence of using the "traditional" commensurate formula.6

Finally, it is important to note that only the "traditional" commensurate formula uses the PIOC projection and that this projection is not used in conjunction with, or as part of, the "Net Revenue" and "CPI-Adjusted NOI" formulas. As stated previously, all three formulas attempt to compensate owners for the adjustment in their operating and maintenance costs measured each year in the PIOC. The "Net Revenue" and the "CPI-Adjusted NOI" formulas attempt to compensate owners for the adjustment in O&M costs by using only the known PIOC change in costs (4.5%). The traditional method differs from the other formulas in that it uses both the PIOC's actual change in costs as well as the projected change in costs (3.4%).

Each of these formulae may be best thought of as a starting point for deliberations. The data presented in other Rent Guidelines Board annual research reports (e.g., the Income and Affordability Study and the Income and Expense Study) along with public testimony can be used in conjunction with these various commensurates to determine appropriate rent adjustments.

Methodology

The Price Index measures changes in the cost of purchasing a specified set of goods and services, which must remain constant both in terms of quantity and quality from one year to the next. The need to exclude the effect of any alterations in the quality of services provided requires that very careful specifications of the goods and services priced must be developed and applied. The pricing specifications must permit the measurement of changes in prices paid for carefully defined pricing units with specific terms of sale, such as cash, volume or trade discounts.

The Methodology section of this report outlines the methods used to calculate each component of the 2018 PIOC, as well as the PIOC projection for 2019.

Owner Survey

The Owner Survey gathers information on management fees, insurance, and non-union labor from building managers and owners. Survey questionnaires, accompanied by a letter describing the purpose of the PIOC, were mailed to the owners or managing agents of rent stabilized If the returned questionnaire was not complete, an interviewer contacted the owner/manager and gathered the missing information. Owners could complete the survey online or by mail. All of the price information given by the owner/managing agent was then confirmed by calling the relevant insurance and management

Commensurates

"Net Revenue" Commensurate Adjustment

3.5%

1-Year Lease 2-Year Lease 6.25%

"Net Revenue" Commensurate Adjustment with Vacancy Increase

1-Year Lease 2-Year Lease

1.75%

3.0%

"CPI-Adjusted NOI" Commensurate Adjustment

1-Year Lease 2-Year Lease

4.5%

7.25%

"CPI-Adjusted NOI" Commensurate Adjustment with Vacancy Increase

1-Year Lease 2-Year Lease

2.5%

4.5%

"Traditional" Commensurate Adjustment

1-Year Lease 2-Year Lease

2.9%

4.0%

companies and non-union employees. The data gathered by the Owner Survey is the only ownerreported data used in the PIOC.

The sample frame for the Owner Survey included over 40,000 rent stabilized buildings registered with New York State Homes and Community Renewal (HCR). In an effort to increase the number of surveys returned to the RGB, staff used a random sampling scheme to choose 7,500 addresses from this pool for the Owner Survey, up from 5,100 used in previous years. The number of buildings chosen in each borough was nearly proportional to the share of rent stabilized buildings in that borough. Three successive mailings were sent at timed intervals to the owner or managing agent of each property selected in the survey sample.

Roughly 8.8% of the questionnaires mailed out received a response, a higher rate than last year (7.1%). A total of 630 returned surveys contained usable information, up from 337 the prior year. As a result, RGB staff was able to validate 463 annual insurance premiums, 91 non-union labor wage rates and 41 reported management fees. The number of verified prices in 2017 and 2018 for the Owner Survey is shown in Appendix B.1.

Taxes

The 2018 tax price relative was calculated by providing a list of rent stabilized properties registered with HCR to the NYC Department of Finance. Finance "matched" this list against its records to provide data on assessed value, tax exemptions, and tax abatements for almost 39,000 buildings in FY 2017 and FY 2018. This data was used to compute a tax bill for each rent stabilized building in each of these fiscal years. The change computed for the PIOC is simply the percentage difference in aggregate tax bills for these buildings from FY 2017 to FY 2018.

Labor Costs

The Labor Costs component consists of the cost of unionized and non-unionized labor. Rate increases for unionized labor, including wage increases and health benefits, come directly from the contracts of unions that represent workers in rent stabilized apartment buildings and hotels. The cost of Social Security and unemployment insurance is obtained from the NYS Department of Labor and the Internal Revenue Service (IRS). Wage increases for non-union labor are obtained from the Owner Survey (see methodology on the previous page).

Fuel

The Fuel component consists of all types of fuel used for heating buildings, including oil, natural gas, electricity and steam.

In order to calculate the change in cost of fuel oil, prices set by fuel oil vendors for a gallon of heating oil are gathered on a monthly basis. A monthly survey makes it possible to keep in touch with fuel oil vendors and to gather the data on a consistent basis (i.e., on the same day of the month for each vendor). Vendors are called each month to minimize the likelihood of misreporting and also to reduce the reporting burden for the companies by eliminating the need to look up a year's worth of prices. The number of fuel oil quotes gathered this year for #2 and #4 oil is similar to last year and is contained in Appendix B.1.

To calculate changes in fuel oil costs, monthly price data is weighted using a degree-day formula to account for changes in the weather. The number of Heating Degree Days (see Endnote 3) is a measure of heating requirements.

The Fuel component includes not only the cost of fuel oil, but also the cost to heat buildings with natural gas, electricity and steam. For these items, RGB staff calculates a hypothetical monthly bill for utilities based in part on supply rates, fuel adjustments, delivery charges, taxes, and other surcharges and fees. Bills are calculated based on typical usage in a multi-family building in New York City, an amount that remains constant from year to year.

Because these items represent prices to heat buildings, monthly price data is adjusted to account for changes in weather. The price relatives for all items in the Fuel component were calculated by comparing the most recent 12-month period from April-March with the prior April-March period.

Utilities

The Utilities component consists of costs for non-heating electricity and natural gas, as well as water and sewer charges. RGB staff calculates a hypothetical monthly bill for electricity and natural gas based in part on supply rates, fuel adjustments, delivery charges, taxes, and other surcharges and fees. Bills are calculated based on typical usage in a multi-family building in New York City, an amount that remains constant from year to year. The price relatives for electricity and natural gas items in the Utilities component were calculated by comparing the most recent 12-month period from April-March with the prior April-March period.

Water and sewer price changes are based on annual rate adjustments set by the NYC Water Board.

Maintenance

All prices for items in this component are obtained using a Vendor Survey. This Survey is used to gather price quotes for items such as painting and other services performed by contractors; hardware and cleaning items (e.g., buckets and pine disinfectant); and appliances that need periodic replacement (e.g., refrigerators and stoves). Each year the vendor database is updated by adding new vendors and by deleting those who no longer carry the products or perform the services outlined in the Vendor Survey item specifications. Vendor quotes were obtained over the telephone, and for non-service based items by telephone and from websites that carry items in the PIOC's market basket of goods. A total of 547 recorded price quotes were gathered. For a description of the items priced and the number of price quotations obtained for each item, refer to Appendix B.1.

In 2017, as part of the Owner Survey sent to owners and management companies, respondents were asked for detailed information on their building maintenance costs. Respondents noted how much they spent in 2016 for contractor services, maintenance supplies and replacement items. Based on the results of this survey, individual items within the Maintenance component were reweighted. In addition, several items were removed from the component, while four

new items were added: Extermination Services, Electrician Services, Large Trash Bags, and Smoke Detectors. See Appendices B.2, B.7 and B.8 for the weights for each of these items.⁷

Administrative Costs

Management fees are obtained directly from building owners and managers, using the Owner Survey (see "Owner Survey" section on page 21). Other expense items, such as accountant and attorney fees, are obtained using the Vendor Survey (see "Maintenance" section, above). For communications costs, because there are so many variations in types of plans for internet and phone service, staff relied on the national Consumer Price Index to obtain price changes for these items. Monthly price changes were obtained from the U.S. Bureau of Labor Statistics website and were calculated by comparing the most recent 12-month period from March-February with the prior March-February period. For a list of all the expense items contained in the Administrative Costs component, see Appendix B.1.

Insurance Costs

The Owner Survey asks owners to provide information about their current and prior year's insurance policies. Temporary workers call the relevant insurance agents/brokers to verify this information. Only verified insurance costs are included in the PIOC.

Price Index Projections

The PIOC Projections are estimated by using data from federal, state and local agencies; estimates from industry experts; and trend forecasting using three-year or long-term averages. The projections in this report are based on the time period from April 2018 to March 2019.

Taxes were projected by using data from the Department of Finance's tentative assessment roll for FY 2019 adjusted by estimates of how the final PIOC tax index has compared to the change in the tentative assessment roll over the last decade. These estimates produce a projected tax cost for owners of rental

properties. Labor costs are projected by calculating the average wage increase of the most recent labor contracts for apartment workers union Local 32-BJ and a ten-year geometric average of all other Labor Costs items. Fuel oil and natural gas costs for the Fuel component are projected by using data and information from the U.S. Energy Information Administration's (EIA) current "Short-Term Energy Outlook" report, which includes assumptions about changes in usage according to a projected return to the average temperature over the last five years. Utility costs are projected by taking the average of the last four New York City Water Board water and sewer rate adjustments as well as EIA projections for residential gas and electricity costs.⁸

The other components — Administrative Costs, Insurance Costs, and Maintenance — are projected by using three-year geometric averages of the component price relatives.

Acknowledgments

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Endnotes

- 1. Prior to 2015, the relative importance of the various goods and services in the market basket was based on a 1983 study of expenditure patterns of owners of rent stabilized apartment buildings. In 2015, the Price Index of Operating Costs (PIOC) component expenditure weights for apartment buildings were changed to the expenditure patterns found in the Rent Guidelines Board's annual Income and Expense (I&E) Study, which allows for the annual updating of expenditure patterns based on what owners report to the New York City Department of Finance as their actual costs on Real Property Income and Expense (RPIE) statements required by Local Law 63 (enacted in 1986). Note that only the Apartment PIOC is weighted with data from RPIE reports. The Hotel and Loft PIOCs continue to use the 1983 study. For a full description of the methodological changes to the expenditure weights used in the current PIOC, please refer to the RGB 2015 Price Index of Operating Costs report at http://www1.nyc.gov/site/ rentguidelinesboard/research/rgb-research-reports.page
- The average CPI for All Urban Consumers, New York-Northeastern New Jersey for the year from March 2017 to February 2018 (269.2)

- compared to the average for the year from March 2016 to February 2017 (264.5) rose by 1.8%. This is the latest available CPI data and is roughly analogous to the 'PIOC year'.
- 3. The cost-weight relatives are calculated on an April to March time period. The April 2017 to March 2018 time period was 2.9% colder than the previous April to March period. "Normal" weather refers to the typical number of Heating Degree Days measured at Central Park, New York City, over the 30-year period from 1981-2010. A Heating Degree Day is defined as, for one day, the number of degrees that the average temperature for that day falls below 65 degrees Fahrenheit.
- See Methodology section of the 2017 Price Index of Operating Costs report for changes in the weighting of Fuel items in 2017 at http://www1.nyc.gov/site/rentguidelinesboard/research/rgbresearch-reports.page
- The following assumptions were used in the computation of the commensurates: (1) the required change in owner revenue is 63.4% of the 2018 PIOC increase of 4.5%, or 2.9%. The 63.4% figure is the most recent ratio of average operating costs to average income in rent stabilized buildings; (2) for the "CPI-Adjusted NOI" commensurate, the increase in revenue due to the impact of inflation on NOI is 36.6% times the latest 12-month increase in the CPI ending February 2018 (1.8%), or 0.66%; (3) these lease terms are only illustrative—other combinations of one- and two-year guidelines could produce the adjustment in revenue; (4) assumptions regarding lease renewals and turnover were derived from the 2014 Housing and Vacancy Survey; (5) for the commensurate formulae, including a vacancy assumption, the 11.43% median increase in vacancy leases found in the rent stabilized apartments that reported a vacancy lease in the 2017 apartment registration file from the New York State Homes and Community Renewal was used; and (6) the collectability of these commensurate adjustments are assumed.
- Whether profits will actually decline depends on the level of inflation, the composition of NOI (i.e., how much is debt service and how much is profit), and changes in tax law and interest rates.
- 7. The 2017 expenditure survey of owner maintenance costs revealed that they spend less on maintenance supplies and replacement items then in previous price indices, eliminating the need to gather so many items representing these two categories. The items removed from the Maintenance component in the 2018 Price Index of Operating Costs were Air Conditioner Repair (513), Light Bulbs (801), Light Switch (802), Wet Mop (803), Floor Wax (804), Pushbroom (806), Detergent (807), Washers (809), Window/glass Cleaner (812), Duplex Receptacle (814), Refrigerator #1 (901), Air Conditioner #2 (904), Floor Runner (905) and Range #1 (907).
- 8. Source: "Short-Term Energy Outlook," March 2018. U.S. Energy Information Administration, Department of Energy.

What's New

From 2015 to 2016, Net Operating Income (revenue remaining after operating expenses are paid) grew 4.4%. This is the 12th consecutive year that Net Operating Income has increased.

On average, in stabilized buildings, from 2015-2016:

- ◆ Rental income increased by 3.1%
- ◆ Total income rose by **3.1%**
- Operating costs increased by 2.4%
- Net operating income (NOI) grew by 4.4%

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 2016, the year for which the most recent data set is available, and the extent to which these conditions changed from the prior year, 2015.

Local Law 63

The income and expense data for stabilized properties originates 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 summary data only after matching I&E data with building registration data from NYS Homes and Community Renewal (HCR). The data used in RGB I&E studies this year includes 15,389 properties containing 705,122 units.

RPIE Study

Rents and Income¹

In 2016, rent stabilized property owners collected monthly rent averaging \$1,371 per unit. As in previous years, units in pre-war buildings rented for less

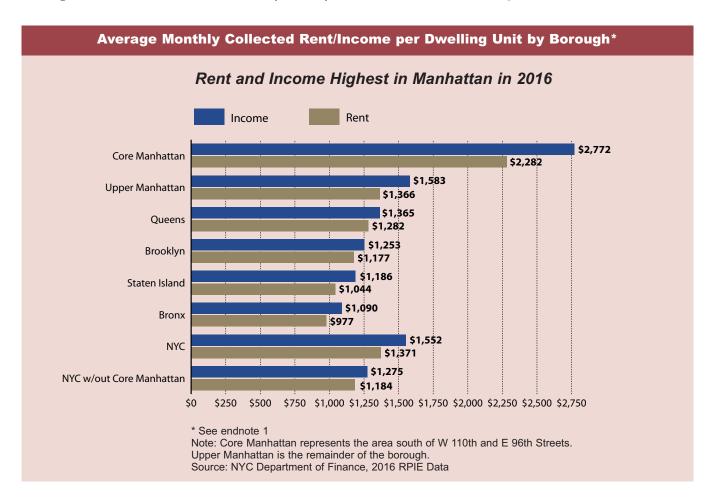
on average (\$1,289 per month) than those in post-war buildings (\$1,589 per month).² At the borough level, the average monthly rents in stabilized buildings were \$1,917 in Manhattan (\$2,282 in Core Manhattan³ and \$1,366 in Upper Manhattan); \$1,282 in Queens; \$1,177 in Brooklyn; \$1,044 in Staten Island; and \$977 in the Bronx. Average monthly rent per unit in the City, excluding Core Manhattan, was \$1,184.

Examining medians, the median rent Citywide was \$1,182. At the borough level, median monthly rent was \$1,627 in Manhattan; \$1,236 in Queens; \$1,105 in Brooklyn; \$1,046 in Staten Island; and \$966 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 \$1,552 per unit in 2016, with pre-war buildings earning \$1,464 per unit and those in postwar properties earning \$1,786 per unit. Gross income was highest in Core Manhattan, at \$2,772 per unit per

month, and lowest in the Bronx, at \$1,090. In between are Upper Manhattan, with an average monthly income of \$1,583; Queens, at \$1,365; and Brooklyn, at \$1,253. Monthly income per unit in the City, excluding Core Manhattan, was \$1,275. These gross income figures encompass rent from stabilized 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 11.7% share of the total income earned by building owners in 2016, down one-tenth of a point from the previous year. By borough, income earned from services and commercial rents was 16.6% in Manhattan (17.7% in Core Manhattan and 13.7% in Upper Manhattan); 12.0% in Staten Island; 10.4% in the Bronx; and 6.1% in both Brooklyn and Queens. The graph on this page shows the average rent and income collected in 2016 by borough, and for the City.

Median Citywide income for owners in 2016 was \$1,280. At the borough level, Manhattan had the



highest median income, at \$1,893; followed by Queens at \$1,285; Brooklyn at \$1,153; Staten Island at \$1,141; and the Bronx at \$1,053. (For rent and income averages and medians by borough and building age and size, see Appendices C.3 and C.4.)

Comparing Rent Measurements

Another data source, NYS Homes and Community Renewal (HCR) annual registration data, provides important comparative rent data to the collected rents stated in RPIE filings. A comparison of the collected RPIE rents to the HCR rents provides a good indicator of the overall rental market and reflects both how well owners can collect the rent roll and the prevalence of vacancies.

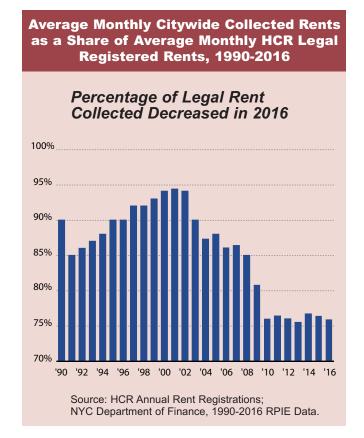
Rents included in RPIE filings are different than HCR figures primarily because of differences in how average rents are computed. RPIE data reflects actual rent collections that account for vacancies or nonpayment of rent. By contrast, HCR data consists of legal rents registered annually with the agency. Because HCR rent data does not reflect preferential rents,4 nor include vacancy and collection losses, these rents are generally higher than RPIE rent collection data. Furthermore, RPIE information includes unregulated apartments in buildings containing rent stabilized units. Also, the RPIE information reflects rents collected over a 12-month period while HCR data reflects rents registered on April 1, 2016. In sum, despite the anomalies between the two rent indicators, the difference between RPIE rents and HCR rents reflects preferential rents as well as vacancy and collection losses incurred by building owners.

In comparing annual RPIE and HCR average rents from 1991 to 2004, the gap between the two contracted steadily during that time. In fact, from 1991-2001, the difference between RPIE and HCR rents decreased by almost two-thirds, from a difference of 15% between the two in 1991 to a difference of 5.6% in 2001. By contrast, from 2002 until 2016, the gap has grown in most years, including this past year, when, the gap rose from 23.6% in 2015 to the current 24.1%, as indicated by the average I&E rent of \$1,371 and HCR's average stabilized rent of \$1,807. The increase in the gap between collected and legal rent

indicates that building owners are collecting a declining proportion of their maximum legal rent in 2016 (see graph on this page).

At the borough level, the gap between collected and legal rent varies. In 2016, Queens property owners collected an average rent (\$1,282) that was 22.4% below HCR's average legal rent for the borough (\$1,651), while owners in the other boroughs collected average rents that were 24.2% lower than legal rents in Manhattan; 25.4% lower in Brooklyn; 25.8% lower in the Bronx; and 32.3% 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.

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 sixth consecutive year. RPIE rent growth, up 3.1%, was greater than the increase in the



RGB rent index, which was up 1.6%, between 2015 and 2016 (adjusted to a calendar year).⁵

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.

In addition, with comparatively lower guidelines from 2013-14 to 2015-16, including two years with rent freezes, all three rent indexes have measurably reflected those lower guidelines, resulting in slower growth each year.

Rent Comparisons, 1990-2016

2015-16 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%
1990 to			
2016*‡	191.5%	217.1%	172.0%

^{*} Not adjusted for inflation **Revised from prior reports Ø See endnote 5 § See endnote 6

An extended view of the three indices illustrates that overall, HCR legal rents have grown faster than both collected rents and RGB rent guidelines from 1990 to 2016. During that period, HCR adjusted legal rents increased 217.1%; RPIE collected rents increased 191.5%; and the RGB Rent Index increased 172.0% (these figures are not adjusted for inflation).⁷

Operating Costs

Rent stabilized apartment buildings regularly incur several types of expenses. RPIE filings include data on eight categories of operating and maintenance (O&M) costs: 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 \$985 in 2016. Costs were lower in units in pre-war structures (\$938), and higher among post-war buildings (\$1,108). Geographically, average costs were lowest in the Bronx (\$742); Staten Island (\$772); Brooklyn (\$799); and Queens (\$873); and highest in Manhattan (\$1,408). Within Manhattan, costs for units located in Core Manhattan averaged \$1,656 a month, while the costs in Upper Manhattan were \$1,033. Excluding Core Manhattan, the average monthly operating costs for stabilized building owners in New York City was \$821. The graph on the next page details average monthly expenses by cost category and building age for 2016. The graph shows that taxes make up the largest share of expenses, averaging 30.2% of all costs among all rent stabilized buildings.

Citywide, 2016 median expenses were \$847. By borough, Manhattan had the highest median costs, at \$1,159; followed by Queens at \$802; Brooklyn at \$744; the Bronx at \$714; and Staten Island at \$693. (Appendices C.1, C.2 and C.3 break down average costs by borough and building age; Appendix C.4

[‡] See endnote 7

Sources: NYS HCR Annual Rent Registrations; NYC Department of Finance, 1990-2016 RPIE Data

details median costs; and Appendix C.6 details distribution of costs.)

In 1992, the NYC Department of Finance and RGB staff tested RPIE expense data for accuracy. Initial examinations found that most "miscellaneous" costs were administrative or maintenance costs, 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 2016 RPIE O&M cost

(\$985) by the results of the 1992 audit results in an

average monthly O&M cost of \$904.

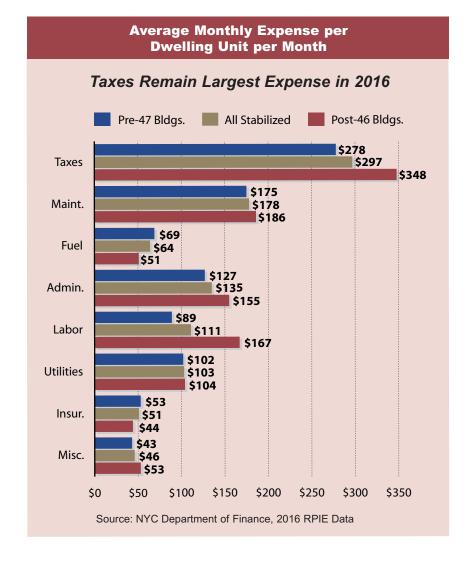
Just as buildings without commercial space typically generate less revenue than stabilized properties with commercial space, operating expenses in these buildings tend to be lower on average than in buildings with a mixture of uses. In 2016, unaudited average O&M costs for "residential-only" buildings were \$894 per month and average audit-adjusted O&M costs for these buildings were \$822 per month.

"Distressed" Buildings

Buildings that have operating and maintenance costs that exceed gross income are considered, for the purposes of this study, distressed. Among the properties that filed RPIEs for 2016, 749 buildings, equal to 4.9% of the total number of rent stabilized buildings, had

reported O&M costs that exceeded gross income, a half point decline from the prior year, and the lowest ever recorded in this study. Since 1990, when 13.9% of stabilized properties were considered distressed, the proportion of distressed buildings declined each year until 1999, reaching 6.1%. 1999 until 2004, proportion generally increased, but has declined for ten of the last twelve years, reaching in 2016 its lowest level in the 27-year history of this study (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 (91%) are pre-war buildings. By borough, 51% of the buildings are in Manhattan; while the remaining buildings are in the Bronx (21%); Brooklyn (16%); Queens (11%) and Staten Island (less than 1%). (See Appendix C.7 for a complete breakdown of distressed buildings by borough, building size and building age.)





Net Operating Income

Revenues exceed operating costs in most stabilized buildings, yielding funds that can be used for mortgage payments, improvements and/or pre-tax 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 \$568 of net income per month in 2016, with units in post-war buildings earning more (\$678 per month) than those in pre-war buildings (\$526 per month). Average monthly NOI is greater among stabilized properties in Manhattan (\$890) than for those in the other boroughs: \$492 in Queens; \$454 in Brooklyn; \$414 in Staten Island; and \$348 per unit per month in the Bronx. There was a notable difference when looking at NOI on a sub-borough level in Manhattan. Core Manhattan properties earned on average \$1,116 per unit per month in NOI, while properties in Upper Manhattan yielded an NOI of

\$550. The monthly NOI average calculated Citywide, excluding Core Manhattan, was \$454. Looking at the NOI using audit-adjusted expense figures, the Citywide NOI in 2016 was \$648.

Average monthly unaudited NOI in "residential-only" properties Citywide was \$525 per unit in 2016, 7.6% 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 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 \$568 per unit by the typical size of buildings in this year's analysis (an average of 45.8 units) yields an estimated average annual NOI of about \$312,176 in 2016. Excluding Core Manhattan, the monthly NOI of \$454 per unit multiplied by the typical size of buildings in this year's analysis outside Core Manhattan (an average of 46.3 units) yields an estimated average annual NOI of about \$252,222.

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 Costto-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 top of the next page shows how over the period from 1990 to 2016, the proportion of total income and rent collections spent on audit-adjusted operating costs has fluctuated. The audit-adjusted Cost-to-Income ratio in 2016 was 58.3%, a decline of half of a percentage point from the prior year's 58.8%. This means that on average, owners of rent stabilized properties spent roughly 58.3 cents out of every dollar of revenue on operating and maintenance costs in 2016. Looking at unaudited expenses, the cost-to-income ratio in 2016 was 63.4,

Ratios of Citywide Average Monthly AuditAdjusted O&M Costs to Average Monthly Gross Income and Rent 1990-2016 Cost-to-Income and Cost-to-Rent Ratios Decrease in 2016 O&M to Rent O&M to Income 75% 60% 60%

'90 '92 '94 '96 '98 '00 '02 '04 '06 '08 '10 '12 '14 '
Source: NYC Dept. of Finance, 1990-2016 RPIE Data

50%

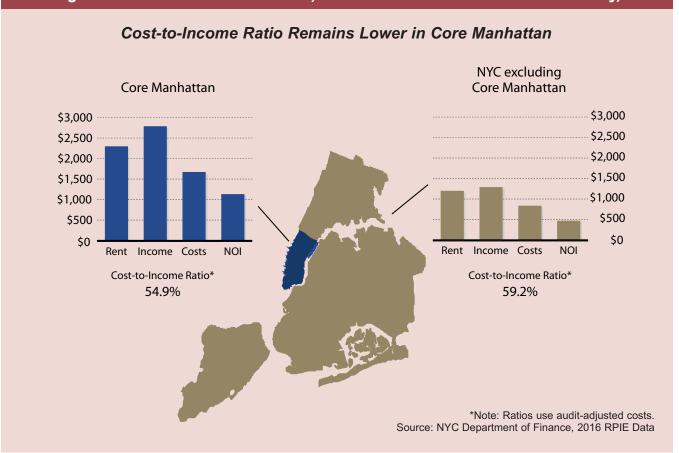
45%

a 0.6 percentage point decline from the prior year. The unaudited median cost-to-income ratio was 64% in 2016.

Examining the ratio of costs to rent collections, audit-adjusted operating costs in 2016 were 66.0% of revenues from rent, down seven-tenths of a percentage point from the prior year. Using unaudited expenses, the cost-to-rent ratio in 2016 was 71.8%, a 0.8 percentage point decline. Looking at the unaudited median cost-to-rent ratio, it was 70% in 2016.

Rents, income, and costs per unit were on average highest in Core Manhattan in 2016 (see map and graphs on the bottom of this page). Excluding Core 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 59.2%, higher than the Cost-to-Income Ratio for stabilized buildings in Manhattan's Core

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, 2016



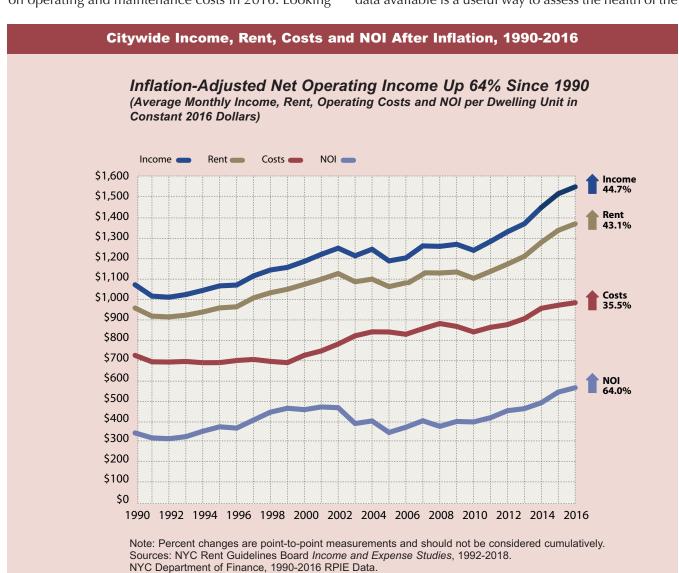
(54.9%). These figures indicate that on average, owners of stabilized properties outside of Core Manhattan spend about 4.3 cents more of every dollar of revenue on expenses, as compared to their counterparts in Core Manhattan.

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 2016. Looking

at the 70% decile level Citywide, 70% of buildings pay no more than 72 cents of every dollar of revenue on operating and maintenance costs, and 30% pay more. The complete table of all ten decile levels Citywide and by borough can be found in Appendix C.8.

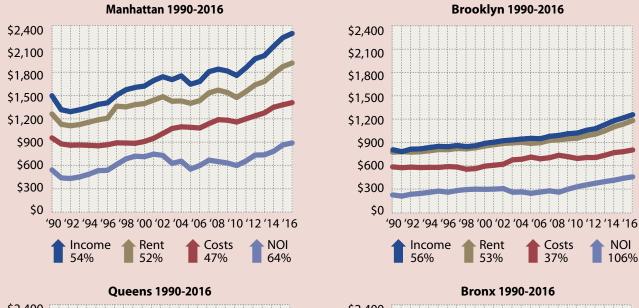
Net Operating Income After Inflation

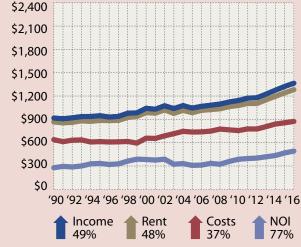
The amount of net operating income is a function of the level of expense and the level of revenue in each year (revenues minus operating expenses equals net operating income). Adjusting NOI as well as rent, income and costs figures for inflation (in constant 2016 dollars) and comparing different base years to the latest data available is a useful way to assess the health of the

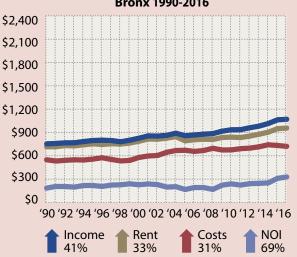


Income, Rent, Costs and NOI After Inflation per Borough, 1990-2016

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 2016 Dollars)







Note: Percent changes are point-to-point measurements and should not be considered cumulatively. Staten Island is excluded due to insufficient data from prior years. Sources: NYC Rent Guidelines Board *Income and Expense Studies*, 1992-2018. NYC Department of Finance, 1990-2016 RPIE Data.

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 2016, after adjusting for inflation, NOI has increased 64.0% (see graph on page 32). This indicates that revenues have outpaced expenses to the extent that average monthly NOI was worth 64% more in 2016 than it was in 1990, after adjusting for inflation. A different point-to-point comparison shows that between 2015 (NOI's second highest year since 1990) and 2016, NOI rose 3.9%, after adjusting for inflation.

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 2016, inflation-adjusted rent increased a cumulative 43.1%, income by 44.7%, and costs by 35.5%, resulting in the increase in NOI of 64.0%.

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 seven 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 (see graphs on previous page). Looking at each of the boroughs individually, from 1990 to 2016, all boroughs saw sizable increases in their net income, with Brooklyn seeing the most significant increase, with NOI more than doubling, increasing 106%; followed by Queens, up 77%; the Bronx, up 69%; and Manhattan, up 64%.

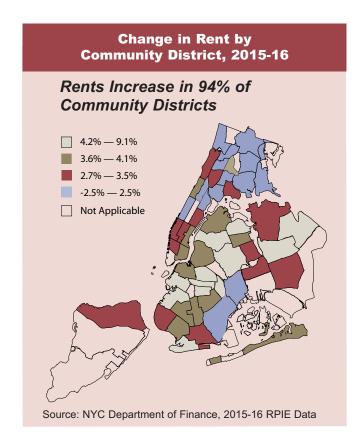
Longitudinal Study

The longitudinal section of this study measures changes in rent, income, costs, operating cost ratios, and net operating income that occurred in the same set of 13,995 buildings from 2015 to 2016.

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 3.1% in 2016. Rent collections in pre-war buildings grew at a higher rate, up 3.2%, than in postwar buildings, which rose by 2.8%. Rent collections increased the greatest among smaller, 11-19 unit buildings, up 3.6%; while rents grew 3.1% among mid-sized, 20-99 unit buildings; and the least among large, 100+ unit buildings, up 2.7%. Examining rent collections by borough, Brooklyn saw the largest increase, up 4.1%; followed by Queens, up 3.9%; Staten Island, up 3.3%; Manhattan, up 2.8%; and the Bronx, up 1.5%. Within Manhattan, Upper Manhattan rents grew at a faster rate, up 3.3%, than the 2.7% increase in rents in Core Manhattan. Rent collections in the City, excluding Core Manhattan, rose 3.2%. The growth in median rent Citywide was 3.7%.



2018 Income and Expense Study

Looking at rent collections throughout New York City, 94% of Community Districts saw increases in average rent from 2015 to 2016.8

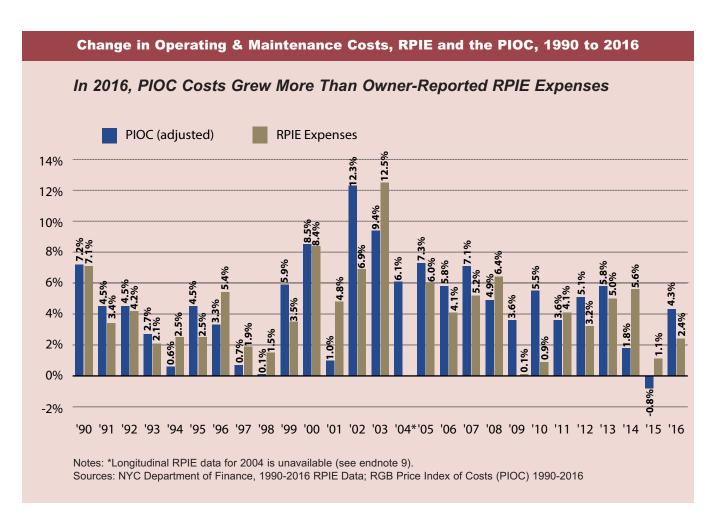
At the neighborhood level, the greatest rent growth was found in Brooklyn's Flatlands/Canarsie, rising 9.1%; followed by Bayside/Little Neck, Queens, up 7.1%; Bedford-Stuyvesant, Brooklyn, up 6.3%; and Hillcrest/Fresh Meadows, Queens, up 6.2%. In Manhattan, the neighborhood growing the most was Morningside/Hamilton Heights, up 4.1%; while East Tremont/Belmont saw the highest growth in the Bronx, rising 4.0%. Conversely, two neighborhoods in the Bronx and one in Brooklyn saw rents decline, with East New York/Starett City, Brooklyn, falling the most, down 2.5%. See map on the previous page and Appendix C.13 for a breakdown of changes in rent collections by Community District throughout NYC.

The average total income collected in rent stabilized buildings, comprising apartment rents,

commercial rents and sales of services, grew by the same percentage as rent, up 3.1% from 2015 to 2016. Revenues grew faster in pre-war buildings, up 3.3%, than in post-war buildings, up 2.6%. Brooklyn saw the highest growth in income, rising 3.9%; followed by Queens, up 3.8%; Manhattan, up 3.1%; Staten Island, up 2.0%; and the Bronx, up 1.6%. Within Manhattan, Upper Manhattan income rose 3.5%; while Core Manhattan income grew by 2.9%. Total income in the City, excluding Core Manhattan, grew 3.2%. The median growth in income Citywide was 3.7%.

Operating Costs

Average expenses in stabilized buildings Citywide increased 2.4% from 2015 to 2016. However, the change in operating costs varied by building age and by borough. Pre-war buildings saw expenses rise 2.1%, while newer, post-war buildings saw expenses increase



2018 Income and Expense Study

2.9%. Breaking down the change in costs by borough, costs grew the most in Brooklyn, up 3.9%; while costs rose 2.8% on Staten Island; 2.7% in Manhattan; and 2.5% in Queens. Conversely, costs declined 0.2% in the Bronx. Within Manhattan, Upper Manhattan costs rose 0.5%; while Core Manhattan costs grew by 3.7%. Operating costs in the City, excluding Core Manhattan, rose 1.8%. Citywide, median expenses rose 1.4%. For a detailed breakdown of the changes in rent, income and costs by building size, age and location, see Appendices C.10 and C.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 1&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 6.) 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, cost-weighted prices and pure prices, whereas the RPIE provides unaudited owner-reported costs. The PIOC grew by 4.3% from 2015 to 2016, the same period as the 2.4% increase in I&E costs, close to a two percentage point difference. (See graph on the previous page.)

From 1990-91 to 2015-16, cumulative growth in owners' costs as measured by the two indices varied. Overall nominal costs measured in the PIOC increased at a greater rate, 196.1%, compared to RPIE data, which grew 173.7% over this period.⁹

Operating Cost Ratios

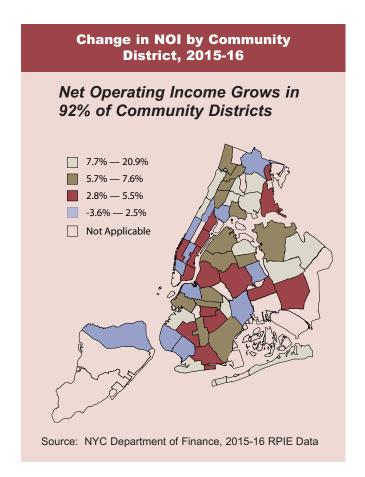
Between 2015 and 2016, the proportion of gross income spent on audit-adjusted expenses (the O&M Cost-to-

Income ratio) declined, falling by four-tenths of a percentage point. The proportion of rental income used for audit-adjusted expenses (the O&M Cost-to-Rent ratio) likewise declined, falling by half a percentage point.

Net Operating Income

Net Operating Income (NOI) refers to the earnings that remain after operating and maintenance (O&M) expenses are paid, but before payments of income tax and debt service. Since average actual collected income grew more than operating costs, Citywide net operating income in rent stabilized buildings increased by 4.4% in 2016, the 12th consecutive year that NOI has grown.

The average change in NOI from 2015 to 2016 differed throughout the City. Every borough saw NOI increase, with Queens seeing the largest growth, up 6.2%; while NOI rose 5.7% in the Bronx; 4.0% in Brooklyn; 3.7% in Manhattan; and 0.5% in Staten Island. Within Manhattan, Upper Manhattan NOI increased 10.0%, while it rose 1.8% in Core Manhattan.



Citywide, NOI in pre-war buildings increased 5.5%, while newer, post-war buildings grew by 2.1%. Monthly NOI in the City, excluding Core Manhattan, increased 6.0%. See Appendix C.12 for a breakdown of NOI by borough, building age and building size.

At the Community District level, NOI rose in the vast majority (92%) of the City. The neighborhoods seeing the greatest growth in NOI were Bayside/Little Neck, Queens, up 20.9%; Morningside/Hamilton Heights, Manhattan, up 19.4%; Morrisania/Melrose/ Claremont, Bronx, up 17.6%; East Tremont/Belmont, Bronx, up 15.4%; and Washington Heights/Inwood, Manhattan, up 14.9%. The Brooklyn neighborhood seeing the greatest growth in NOI was Brownsville/ Ocean Hill, up 10.7%. By contrast, neighborhoods in the Bronx, one on Staten Island and one in Brooklyn experienced a decline in NOI, with the largest decline, 3.6%, in East New York/Starett City, Brooklyn. The map on the previous page and Appendix C.13 shows how NOI varied in each neighborhood throughout NYC. (See endnote 8.)

Summary

RPIE filings, from almost 15,400 rent stabilized buildings containing over 705,100 units in the main RPIE study, and from close to 14,000 buildings containing almost 651,000 units in the longitudinal study, were analyzed in this year's Income and Expense Study. Citywide, average rent and revenue collections each rose 3.1%; and expenses rose by 2.4%. Since collected revenue grew more than actual expenses, Net Operating Income (NOI) Citywide increased by 4.4%, the 12th consecutive year that NOI has increased. (See table on next page for historical data.) Additionally, the proportion of distressed properties Citywide once again declined to their lowest level ever recorded by this survey, falling half a percentage point from the prior year. Further, the auditadjusted cost-to-income ratio was 58.3%, also down half a percentage point from last 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 2017 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 2016, was made available to NYC Rent Guidelines Board research staff in November 2017 for analysis. Unit averages contained in this analysis were computed by the NYC Department of Finance. The averages were then weighted by the RGB using data from the 2014 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 and are unweighted.

Two types of summarized data, the 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 2016, or alternatively, TCIE (Tax Commission Income & Expense) forms. 10 Data from the forms was used to compute average and median rents, operating costs, etc., that were typical of the year 2016. Longitudinal data, which provides a direct comparison of identical elements over time, encompasses properties that filed RPIE/TCIE forms for the years 2015 and 2016. 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 2016, while the longitudinal data section measures changes in conditions that occurred from 2015 to 2016.

This year, 15,389 buildings containing rent stabilized units were analyzed in the main RPIE study and 13,995 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 2017 RPIE or TCIE statements (or 2016 and 2017 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

2018 Income and Expense Study

Changes in Average Monthly Rent, Income, Operating Costs and Net Operating Income per Dwelling Unit, 1990-2016

Net Operating Income (NOI) Increased 4.4% from 2015 to 2016, 12th Consecutive Yearly Increase in NOI

	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%	

Source: NYC Department of Finance, 1990-2016 RPIE Data Note: Longitudinal data from 2003-04 is unavailable.

2018 Income and Expense Study

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 2017 for the main part of this study, or an RPIE or TCIE form in both 2016 and 2017 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.
- 3. Core Manhattan represents the area south of W 110th and E 96th Streets. Upper Manhattan is the remainder of the borough.
- 4. 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 2016 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 6.
- 6. 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.
- 7. RPIE longitudinal data from 2003-04 is excluded from this study because no longitudinal data was available for 2003-04. Therefore, the growth in RPIE collected rents, 191.5%, is understated. To make a more valid comparison between the three indices, cumulative increases in both the RGB Rent Index and HCR contract rent calculations exclude 2003-04 data as well. If 2003-04 data were included, the RGB Rent Index increased 186.9% and the HCR rent increased 222.3%.
- 8. 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 and do not necessarily represent the population of buildings in these Community Districts. All averages were computed by the NYC Department of Finance.
- Due to the unavailability of RPIE longitudinal data for 2003-04, PIOC data from 2003-04 is also excluded from this comparison.
- TCIE (Tax Commission Income & Expense) forms are used by the NYC Department of Finance when RPIE forms are not filed by owners.

2018 Mortgage Survey Report

What's New

- Average interest rates for new multifamily mortgages increased 57 basis points, to 4.83%.
- Vacancy and collection losses decreased 0.09 percentage points, to 2.83%, the lowest level recorded by this survey.
- Average service fees for new loans remained unchanged, at 0.44 points.
- Average maximum loan-to-value ratios fell 0.16 percentage points, to 73.5%.
- In 2017, 793 buildings containing rent stabilized units were sold Citywide, a 32% decline from the prior year.

Introduction

Section 26-510 (b)(iii) of the Rent Stabilization Law requires the NYC Rent Guidelines Board (RGB) to consider the "costs and availability of financing (including effective rates of interest)" in its deliberations. To assist the Board in meeting this obligation, each winter the RGB research staff surveys lending institutions that underwrite mortgages for multifamily rent stabilized properties in New York City. (See Appendix D.6 for a reproduction of the survey.) The survey provides details about New York City's multifamily lending market during the 2017 calendar year as well as the first few months of 2018.

The survey is organized into three sections: financing availability and terms for rent stabilized buildings; underwriting criteria; and additional mortgage questions, including vacancy and collection losses, operating and maintenance expenses, and portfolio performance information. In addition to the survey analysis, rent stabilized building sales data, obtained from the NYC Department of Finance, is also examined.

Overview

This year's Mortgage Survey found that interest rates rose but service fees remained unchanged. In addition, collection losses continued to decline, falling to a record low; maximum loan-to-value ratios fell slightly; and underwriting criteria remained similar. Furthermore, our analysis of rent stabilized building sales data found that sales volume declined Citywide between 2016 and 2017.

This report will more fully detail this data, beginning with a discussion of the characteristics of all of this year's survey respondents, followed by a longitudinal analysis of those responding both last and this year. Further, it will examine rent stabilized building sales data by volume and price.

Survey Respondents

Twelve financial institutions responded to this year's survey, one fewer than last year. This year's respondents include a variety of traditional lending institutions, such as savings and commercial banks, as well as non-traditional lenders.

Institutions holding deposits insured by the Federal Deposit Insurance Corporation (FDIC) supply details about their holdings on a quarterly basis, including their multifamily real estate holdings, which vary considerably among the respondents. Nine surveyed lenders report their multifamily real estate holdings to the FDIC, with values ranging between \$16.5 million and \$26.6 billion. Five of this year's respondents reported multifamily holdings of over one billion dollars, while three institutions held less than \$100

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million. The multifamily real estate portfolio of our survey respondents averaged \$5.1 billion, up 2.5% from the prior year.

Mortgage Survey Analysis

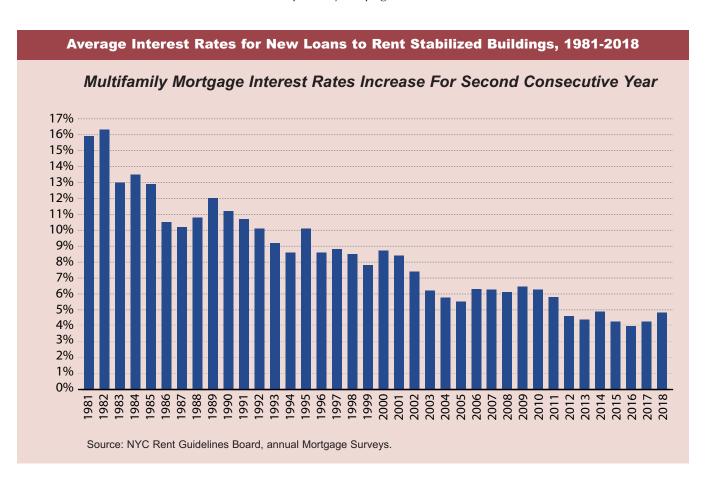
Financing Availability and Terms

As of February 2018, the average interest rate for new multifamily mortgages was 4.83%, a 57 basis points (or 13%) increase from the previous February, the second consecutive year of an increase, following a survey record low two years ago (see graph on this page and Appendix D.1). Likewise, the average interest rate reported by lenders for the 2017 calendar year was 4.43%, an eight basis points (or 2%) increase from 2016.

Average interest rates increased during the year among the institutions surveyed, mirroring interest rate increases by the Federal Reserve (The Fed). The Discount Rate — the interest rate at which depository

institutions borrow from the Federal Reserve Bank of New York — rose 25 basis points on three occasions in 2017 (March, June and December), as well as in March 2018, and the Federal Funds Rate — the interest rate at which depository institutions lend balances at the Federal Reserve to other depository institutions — similarly rose 25 basis points in each of those aforementioned months.² The Fed is expected to continue to increase interest rates again in 2018 and 2019, based on their confidence in the growth of the U.S. economy.³

Points charged for new loans remained near a record low this year. Among survey respondents, they ranged between zero and one, with five surveyed lenders charging no points on new loans. The average service fee charged on new loans by lenders was 0.44 points, the same as last year, and little changed from the record low average of 0.42 two years ago. Average fees reported in the survey have remained around or below one point for two decades (see the graph on page 44).



Surveyed lenders, for the most part, remained flexible in the loan maturity terms they offered their borrowers. Since survey respondents typically offer a wide range of terms rather than a single number, it is not possible to provide an average for the range of terms offered by institutions, but they remained similar to those offered in recent years. Mortgage terms reported by respondents fell within a wide 5- to 40-year range. This continued mortgage term flexibility over recent years is in great contrast to terms reported in the surveys of the early- to mid-1990s, when close to half of respondents offered maximum loan maturities of just five years.

The average volume of new mortgage originations in our survey fell from 105 last year to an average of 43 new loans per institution financed this year, in part due to the absence of one larger lender from this year's survey. However, the average number of refinanced loans increased this year, rising from 43 last year to 53 this year, a 22% increase. Overall loan volume is well below the peak year of 2004, when our survey reported an average of 160 new loans per institution. This year, 42% of lenders reported no change in new loan volume, while a third reported an increase in loan volume, and the remaining quarter reported a decline.

Underwriting Criteria

The survey asked lenders for their typical underwriting standards when approving new and refinanced mortgages to rent stabilized building owners. Lenders this year, on average, reported lending standards similar to last year. For all institutions, the typical maximum Loan-to-Value (LTV) ratio — the maximum dollar amount respondents were willing to lend based on a building's value — ranged from 60% to 82.5%. This year's average, 73.5%, was little changed from last year's 73.7% (see graph on page 45).

Another important lending criterion is the debt service ratio — an investor's ability to cover mortgage payments using its net operating income (NOI). The higher the debt service coverage requirements, the less money a lender is willing to loan given constant net income. The debt service ratio (or NOI divided by the debt service) remained virtually unchanged, with an average debt service requirement of 1.23, versus 1.22 last year. Because the average debt service ratio remained about the same, lenders have maintained the amount of money they are willing to lend in relation to the net operating income of buildings (see Appendix D.2). Overall, debt service coverage at all institutions ranged between 1.20 and 1.25, and only one surveyed lender reported adjusting its underwriting standards over the past year.

Lenders also noted additional standards they use when evaluating loan applications. The most commonly cited standard is good building maintenance, with a third of lenders indicating that it is an important consideration when reviewing a loan application.

Terms and Definitions

Actual LTV - the typical loanto-value ratio of buildings in lenders' portfolios

Basis Points - a common unit of measure for interest rates and other percentages in finance. One basis point is equal to 1/100th of 1%, or 0.01 percentage point

Debt Service - the repayment of loan principal and interest

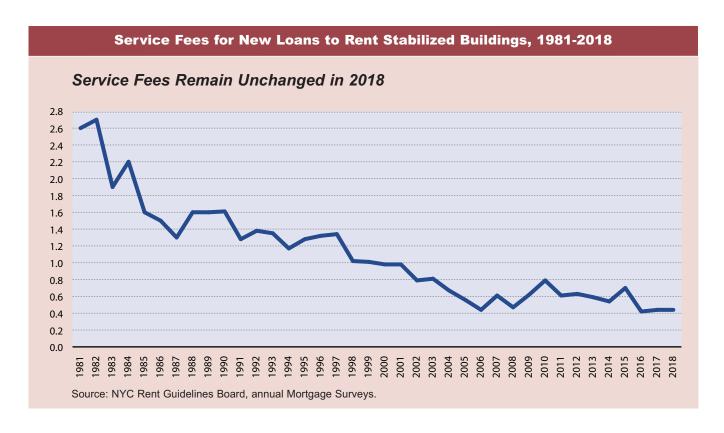
Debt Service Ratio - net operating income divided by the debt service; measures the risk associated with a loan; the higher the ratio, the less money an institution is willing to lend

Loan-to-Value Ratio (LTV) - the dollar amount institutions are willing to lend based on a building's value; the lower the LTV, the lower the risk to the lender

Maximum LTV - the loan-tovalue ratio set by the lenders as part of their underwriting criteria

Points - up-front service fees charged by lenders as a direct cost to the borrowers

Terms - the amount of time the borrower has to repay the loan; generally, the term should not exceed the remaining economic life of the building



The survey asked lenders whether their lending standards differ for rent stabilized buildings versus nonstabilized multifamily properties. Respondents were asked whether their new financing rates; refinancing rates; loan-to-value ratios; and debt service coverage requirements for rent stabilized properties were higher, lower, or the same as for other properties. While the majority of lenders reported no difference, one lender reported higher financing and refinancing rates; and another lender reported more conservative debt service coverage for stabilized buildings. By contrast, one lender reported more favorable financing and refinancing rates; two lenders reported better LTV ratios; and another two lenders reported more lenient debt service coverage requirements for stabilized buildings in their portfolios.

Non-Performing Loans & Foreclosures

The number of lenders reporting that they had non-performing loans declined this year, from four last year to one this year. These loans made up 0.005% of the lender's portfolio this year. In addition, the same

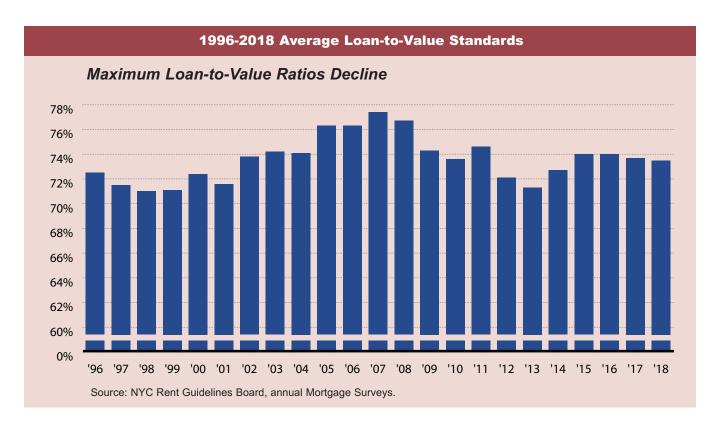
lender also reported foreclosures this year (compared to two lenders last year), making up 0.002% of their portfolio.

Characteristics of Rent Stabilized Buildings

The size of buildings in surveyed lenders' portfolios varies widely. The most commonly reported building size is 50-99 units, with half of all lenders reporting this size as typical, while a quarter report that their typical building is 1-10 units.

Average vacancy and collection (V&C) losses decreased for the seventh time in the last eight years, down from 2.92% last year to 2.83% this year, the lowest level in the history of the Mortgage Survey Report (see graph on page 46). Among all the lenders, reported V&C losses ranged from less than 1% to no more than 5%.

Average operating and maintenance (O&M) expenses and average rents among buildings in lenders' portfolios changed in opposite directions this year. Average rent per unit per month rose 7.1%, to \$1,281 this year, while expenses fell 8.4%, to \$598 this year



(see Appendix D.2). Because average rent increased and costs declined, the average O&M cost-to-rent ratio fell from 53.2% last year to 46.7% this year.

The NYC Rent Guidelines Board, in our annual *Income and Expense (I&E) Study*, examines the average O&M cost-to-rent ratio as well.⁴ However, its findings should not be compared to the cost-to-rent ratio reported in the *Mortgage Survey Report* because the sources are very different, and the data studied in each report are from different time periods. In the *2018 I&E Study*, which reported on data from calendar year 2016, the average O&M cost-to-rent ratio was 71.8%.⁵

The survey asks lenders whether they retain their mortgages or sell them in secondary markets. All but three lenders reported retaining all their mortgages, about the same proportion as last year.

Lenders are asked whether the rent stabilized buildings that are offered mortgage financing contain commercial space. This information is useful to help understand the extent to which owners earn income from sources other than residential tenants. All but one surveyed lender this year reported that buildings in their portfolio contain commercial space, though the average number varies depending on the lender. On

average, lenders report that 35% of their portfolios contain commercial space, about the same as last year.

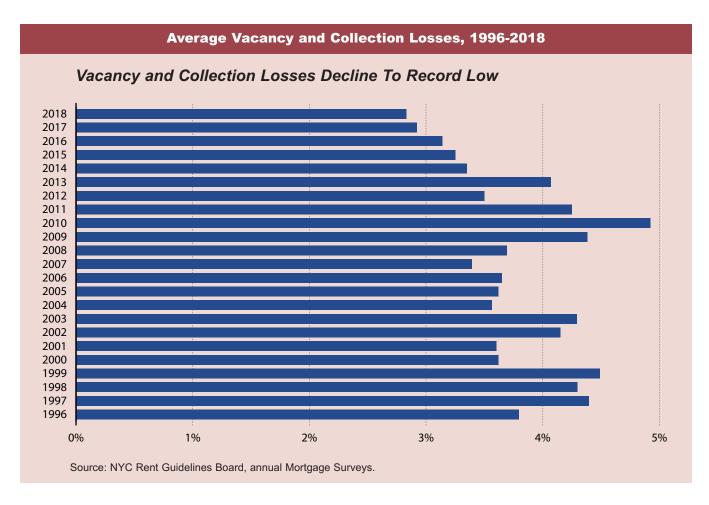
Loan Expectations

The survey asks lenders about the performance of their portfolios, compared with expectations at the time of initial loan origination, regarding net operating income (NOI); debt service coverage; and O&M expenses. A majority of lenders reported that their expectations had been met or exceeded in all areas among their rent stabilized portfolio. Specifically, at least 83% said this year that their expectations were equaled or exceeded among all three categories, an increase from the prior year, when at least two-thirds said the same thing.

Longitudinal Analysis

Information regarding rent stabilized buildings can also be examined longitudinally to more accurately assess changes in the lending market, since many respondents reply to the Mortgage Survey in at least two successive years. This longitudinal comparison

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helps to clarify whether changes highlighted in the primary mortgage survey analysis reflect actual variations in the lending market or simply the presence of a different group of lenders from year to year. Among the 12 respondents that completed the survey this year, all also responded last year. The 12 lenders that make up the longitudinal group, and their responses from both this year and last year, are compared in this section to illustrate changes between the two years.

Financing Availability and Terms

Because all lenders responded in both years, this year's longitudinal analysis reveals findings that in many cases are similar to this year's main survey analysis. The average interest rate among the longitudinal group for new loans, as of February 2018, was 4.83%, an increase from a year earlier, when the average interest rate was 4.36% for new financing (see Appendix D.3).

Among the longitudinal group, average points offered by lenders declined from last year, falling from 0.48 to 0.44.

Underwriting Criteria and Loan Performance

The average maximum loan-to-value (LTV) ratio remained unchanged this year, holding at 73.5% among the longitudinal group. The average debt service ratio rose slightly, up from 1.22 last year to 1.23 this year (see Appendix D.4). And like the main mortgage survey analysis, vacancy and collection (V&C) losses among the longitudinal group declined, to 2.83% this year, from 3.13% last year.

Looking at the rate of delinquencies among the longitudinal group, only one lender reported non-performing loans, down from four last year. Similarly, only one lender reported foreclosures this year, while two lenders reported foreclosures the previous year.

Selected 2018 Mortgage Survey Data Compared to 2017 Mortgage Survey Data

Average Interest Rates, Loan Volume, Points, Loan-to-Value Ratios, Debt Service Coverage, and Vacancy & Collection Losses

(Averages)	NF Interest Rate	NF Loan Volume	RF Loan Volume	NF Points	Max LTV Ratio	Debt Service Ratio	V&C Losses
2018 Mortgage Survey Data	4.83%	43	53	0.44	73.5%	1.23	2.83%
2017 Mortgage Survey Data	4.26%	105	43	0.44	73.7%	1.22	2.92%

NF= New Financing RF= Refinancing
Source: NYC Rent Guidelines Board, Annual Mortgage Surveys

LTV=Loan-to-Value

V&C=Vacancy and Collection

Sales Data Analysis

The NYC Department of Finance collects and provides public property sales information online. Utilizing this data, this report examines sales data from 2017, and compares it with the prior year. This year's sales data analysis includes buildings listed as sold in 2017 in the Department of Finance database. These are matched to buildings that have filed NYS Homes and Community Renewal (HCR) building registrations; have not converted to co-op/condo; and have sold for at least \$1,000.

Building Sales Volume

In 2017, 793 buildings containing rent stabilized units were sold in New York City, down 32% from the prior year. Each borough saw sales volume decline, though at differing proportions. In Manhattan, sales fell the most, falling 43%; while in the Bronx, sales declined 33%; in Queens, they were down 24%; and in Brooklyn, sales fell the least, declining 23%. As in prior years, Staten Island was not included in this analysis because there were too few rent stabilized building sales to meaningfully measure change from year to year.⁶ (See the table on this page for a numerical breakdown in the change in the number of buildings sold in each borough and Citywide.)

Among the smallest rent stabilized buildings sold in 2017, containing 6-10 residential units, sales volume was down 18% Citywide, but the decline varied by borough. Sales among 6-10 unit buildings fell the most in the Bronx, down 31%, and fell the least in Queens, down 13%. In between were Brooklyn, down 15%, and Manhattan, down 26%.

Sales volume among 11-19 unit buildings also declined, falling 36% Citywide. In Manhattan, sales fell by almost half, declining 49%; followed by the

Comparison of Building Sales in 2016 vs. 2017

Sales Volume Decline Varies by Borough

	2016	2017	Change
Bronx	234	156	-33.3%
Brooklyn	378	292	-22.8%
Manhattan	407	233	-42.8%
Queens	148	112	-24.3%
Citywide	1,167	793	-32.0%

Note: Citywide figures exclude Staten Island Source: NYC Department of Finance



Bronx, declining 23%; and Brooklyn, down 21%. (There were too few 11-19 unit building sales in Queens to analyze.)

Among 20-99 unit buildings, sales volume also declined Citywide, falling 41%. By borough, sales of 20-99 unit buildings in Brooklyn fell the most, down 46%; followed by Manhattan, down 42%; the Bronx, down 38%; and Queens, down 33%.

Among the largest buildings, which contain 100 or more units, sales volume Citywide decreased 62%. Unfortunately, we are unable to analyze sales data by borough because of the small number of buildings sold. However, these buildings sales are included in the totals by borough and Citywide.⁷

Building sales data show that, since 2003, sales volume reached a peak in 2005, but by 2009, sales Citywide were at their lowest level of the fifteen-year period for which we have data. Between 2009 and 2015, sales volume Citywide increased every year but one. However, over the last two years, sales have fallen to their lowest level since 2011. See the graph on this page and Appendix D.7 for annual sales volume Citywide.

Building Sales Prices

We also examine 2017 sales prices Citywide and by borough. However, in reporting sales prices, we are not able to take into consideration the condition of the building or the neighborhood where each building is sold, factors important in determining the sales price.

Examining rent stabilized building sales prices for all sizes of buildings, the median Citywide sales price was \$3.8 million in 2017. The highest median sales price was in Manhattan (\$8.3 million); followed by the Bronx (\$4,215,500); Brooklyn (\$2.1 million); and Queens (\$1,725,000).

Examining the smallest buildings (containing 6-10 residential units), the median sales price Citywide was \$1,585,392. By borough, prices were highest in Manhattan, at \$5,525,000; followed by Brooklyn, at \$1,575,000; Queens, at \$1,450,000 and the Bronx, at \$1,190,000.

Among 11-19 unit buildings, the median Citywide price was \$3,675,000. By borough, sales prices were again highest in Manhattan, at \$7,595,000; followed

2018 Mortgage Survey Report

by Brooklyn, at \$3,275,000; and the Bronx, at \$2,645,000. (There were too few 11-19 unit building sales in Queens to analyze.)

Buildings with 20-99 units sold Citywide at a median price of \$9 million. By borough, these buildings sold for the most in Manhattan, at a median price of \$12 million; followed by Queens, at \$11,546,512; Brooklyn, at \$7.5 million; and the Bronx, at \$5,887,500.

Among the largest buildings, which contain 100 or more units, buildings Citywide sold for a median price of \$35 million. However, as previously mentioned, too few buildings containing 100 or more residential units were sold to accurately report borough building prices in more detail. See Appendix D.8 for a breakdown of median sales prices in each borough among different sized buildings.

Summary

In conclusion, while interest rates rose and service fees remained unchanged, vacancy and collection losses fell to their lowest level in this survey's history. In addition, the number of rent stabilized buildings sold declined from the prior year.

(I&E) Study, in which average rent was \$1,371 and average unaudited cost was \$985, reflects rents and expenses reported by owners for calendar year 2016. Average monthly costs per unit in the Mortgage Survey this year are lower than those reported in the I&E. This is due to differences in the two data sources: Lenders' estimated average of buildings in an institution's portfolio vs. a weighted average of a large number of owner-reported data; the large variance between the two sample sizes; and the difference between the buildings studied in each analysis. (Buildings required to file Real Property Income and Expense (RPIE) forms must generally have an assessed value greater than \$40,000 and eleven or more units, while the Mortgage Survey does not exclude these buildings).

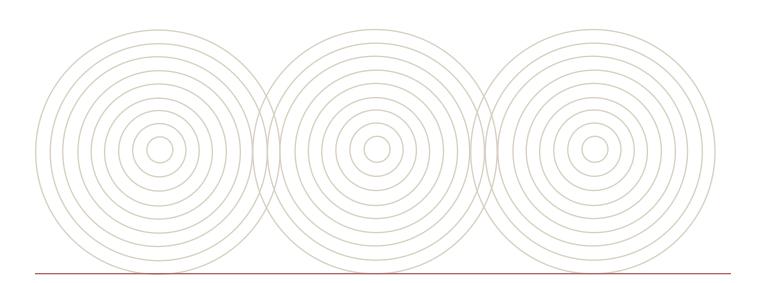
- 6. The data reflect sales of buildings that had been registered with the New York State Homes and Community Renewal (HCR) as containing rent stabilized units in 2016, the most recent year for which comprehensive registration records are available. It excludes those buildings where the sales price was listed as less than \$1,000. It also excludes those buildings listed as co-ops/condos. Furthermore, all of Staten Island is excluded from all analyses due to the small number of eligible buildings sold.
- All 100+ unit building borough categories are excluded due to the small number of buildings sold. However, while these categories are not discussed, these buildings are included in the overall statistics and analyses.

Endnotes

- Federal Deposit Insurance Corporation (FDIC) website: https://fdic.gov
- Federal Reserve Board website: https://www.federalreserve.gov/monetarypolicy/openmarket.htm and https://www.frbdiscountwindow.org
- "Fed Raises Interest Rates for Sixth Time Since Financial Crisis," by Jim Tankersley, New York Times. March 21, 2018.
- 4. The per unit, per month O&M expense and rent figures reported in the Mortgage Survey reflect a very small, non-random sample of the City's regulated stock and are included for informational purposes only. The rent and expense figures in the NYC Rent Guidelines Board's *Income and Expense Study* are derived from a substantially larger number of stabilized buildings and can be viewed as more authoritative.
- 5. The O&M cost-to-rent ratio from the 2018 Mortgage Survey reflects estimates by lenders of expenses and rents for rent stabilized buildings as of approximately February 2018. The average ratio is calculated from just nine respondents. By comparison, the latest available O&M cost-to-rent ratio from the *Income and Expense*

Income and Affordability

2018 Income and Affordability Study...... pg. 53



What's New

- ◆ Results from the 2017 Housing and Vacancy Survey show that for rent stabilized tenants, the median contract rent is \$1,269, median gross rent is \$1,375, median household income is \$44,560, and the median gross rent-to-income ratio is 36.0%.
- ◆ Results from the 2016

 American Community

 Survey show that median renter income is \$45,753, median gross rent is \$1,351, and the median gross rent-to-income ratio is 31.9%.
- NYC's economy grew by an inflation-adjusted 2.4% in 2017.
- Inflation-adjusted wages were flat in the most recent time period studied (the fourth quarter of 2016 through the third quarter of 2017), rising just 0.03%.
- ◆ The City gained 81,000 jobs in 2017, a 1.9% increase from 2016.
- The unemployment rate fell in 2017, to an average of 4.5%, down from 5.2% in 2016.
- An average of 59,467 persons were staying in NYC Department of Homeless Services shelters each night of 2017, up 1.2% from 2016.
- Non-payment filings in housing court decreased 0.4% in 2017, while cases actually heard increased 9.0%. The number of tenant evictions fell 4.6%.

Introduction

Section 26-510(b) of the Rent Stabilization Law requires the Rent Guidelines Board (RGB) to consider "relevant data from the current and projected cost of living indices" and permits consideration of other measures of housing affordability in its deliberations. To assist the Board in meeting this obligation, the RGB research staff produces an annual *Income and Affordability Study*, which reports on housing affordability and tenant income in the New York City (NYC) rental market. The study highlights year-to-year changes in many of the major economic factors affecting NYC's tenant population and takes into consideration a broad range of market forces and public policies affecting housing affordability. Such factors include NYC's overall economic condition — unemployment rate, wages, Consumer Price Index and Gross City Product — as well as the number of eviction proceedings and the impact of federal housing policies.

Overview

Looking at NYC's economy during 2017, it showed many strengths as compared with the preceding year. Positive indicators include growing employment levels, which rose for the eighth consecutive year, increasing 1.9% in 2017. The unemployment rate also fell, declining by 0.7 percentage points, to 4.5%, the lowest level recorded in at least the last 42 years. Gross City Product (GCP) also increased for the eighth consecutive year, rising in inflation-adjusted terms by 2.4% in 2017. The number of non-payment filings in Housing Court fell by 0.4%, and evictions fell by 4.6%. There was also a decrease in cash assistance caseloads of 1.1%, while SNAP caseloads fell 1.5% and Medicaid enrollees fell 10.6%.

Negative indicators include the ninth consecutive year of increase in homeless levels, which rose to an average of 59,467 persons a night, an increase of 1.2% over 2016 levels. Inflation is growing at a faster pace, with a 2.0% increase during 2017, compared to 1.1% during 2016. The number of calendared cases in Housing Court also rose, increasing 9.0%, while personal bankruptcy filings rose 12.4%.

In addition, inflation-adjusted wages remained flat during the most recent 12-month period for which data is available (the fourth quarter of 2016 through the third quarter of 2017), rising just 0.03% over the corresponding time period of the prior year, although rising 2.0% in current dollars.

The most recent numbers, from the fourth quarter of 2017 (as compared to the fourth quarter of 2016), show many positive indicators, including cash assistance levels down 2.6%; SNAP recipients down 3.5%; employment levels up 1.7%, the unemployment rate down 0.7 percentage points; homeless rates down 0.01%; and GCP rising, by 1.2% in real terms. At the

same time, the number of cases heard in Housing Court were up 0.3%¹ and the number of non-payment filings in Housing Court were up 0.4%.2

Economic Conditions

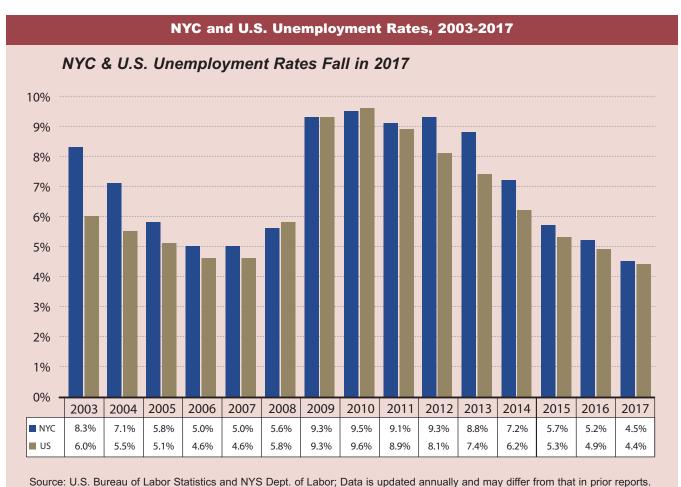
Economic Output and Consumer Prices

NYC's economy expanded during 2017, growing for the eighth consecutive year. NYC's Gross City Product (GCP), which measures the total value of goods and services produced, increased by 2.4% in inflationadjusted ("real") terms during 2017, following an increase of 2.5% in 2016.3 There has been positive economic growth in real terms in all but two quarters since the beginning of 2009. During 2017, the greatest growth was during the third quarter, a 3.6% rise. For comparison, GCP increased in real terms by an annualized average of 1.6% per year between 2000 and 2009 and 4.3% in the 1990s. The analogous national number, United States Gross Domestic Product (GDP), increased a "real" 2.3% during 2017, compared to an increase of 1.5% during 2016.4

The Consumer Price Index (CPI), which measures the change in the cost of typical household goods, increased 2.0% in the NYC metropolitan area during 2017, a higher rate of inflation than seen in the previous year, when prices rose on average 1.1%.5 Inflation was lower than that of urban consumers in the U.S. as a whole, with prices rising 2.1%, following an increase of 1.3% during 2016.

Unemployment Statistics

NYC's unemployment rate fell for the fifth consecutive year, declining 0.7 percentage points, to 4.5%.6 This is the lowest unemployment rate in at least the last 42



years⁷ (the first year for which data is available), and is 0.5 percentage points lower than the previous lowest unemployment rate of 5.0% in both 2006 and 2007. The U.S. unemployment rate declined by a smaller proportion, falling from 4.9% in 2016 to 4.4% in 2017, a 0.5 percentage point drop.⁸ (See graph on previous page and Appendix E.1.)

In both January and February of 2018, the most recently available data, the unemployment rate for NYC (4.6% and 4.4%, respectively) was lower than that of the same months of the previous year, with rates 0.4 percentage points lower in January and 0.6 percentage points lower in February. The analogous national figure was 4.5% in January of 2018 and 4.4% in February, 0.6 percentage points lower than January of 2017 and 0.5 percentage points lower than the previous February.

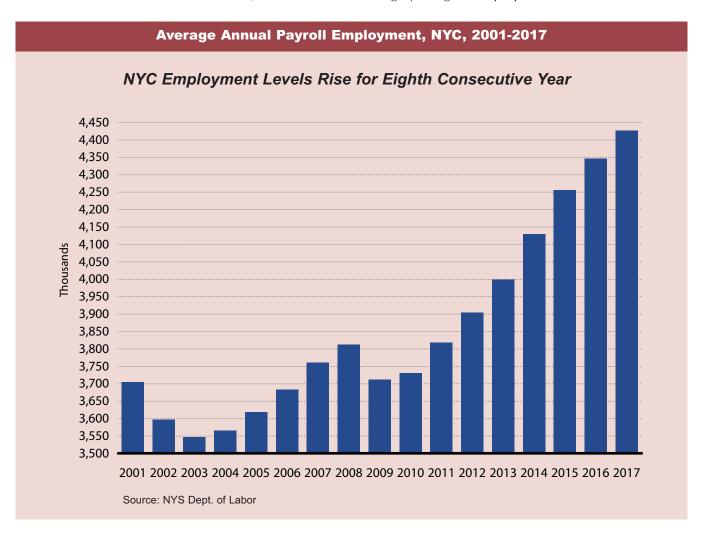
For all of 2017, Manhattan and Queens had the

lowest unemployment rates of the boroughs, 4.0%, with Staten Island and Brooklyn's rate at 4.6%, and the Bronx, consistently the borough with the highest unemployment rate, averaging 6.2%. Unemployment rates fell in every borough during 2017, from between 0.5 percentage points in Manhattan and Queens, to as much as 0.9 percentage points in the Bronx.

Employment Statistics

For the eighth consecutive year, the number of people employed in NYC increased, following gains in all but one year since 2003 (see graph on this page). Overall, among both City residents as well as those commuting into the City, NYC gained 81,000 jobs in 2017, a 1.9% increase from 2016.9

Employment levels rose in all but two industries, rising by the greatest proportion in the Education and



Health Services sector, which grew by 3.7% (34,700 jobs) during 2017. The Professional and Business Services sector also grew, rising by 2.8% (20,000 jobs) during 2017, and the Leisure and Hospitality sector grew by 2.7% (11,900 jobs). In the Manufacturing sector, which has declined in all but five years since 1990 (the first year for which data is available), employment fell by 3.9% (3,000 jobs), and is down more than 72% as compared with 1990. The Government sector also fell, declining by 0.04% (200 jobs). All other sectors rose from between 0.6% and 2.6%. (See Appendix E.2 for more detailed employment data.)

During the first two months of 2018, total employment levels were up as compared to the same months of 2017, with levels 1.7% higher in both January and February of 2018 as compared with 2017. Employment levels were up in all but three sectors in January, and two in February (with Manufacturing and Government employment levels down in both months).

Two other employment indices are tracked in the *I&A Study*. The NYC labor force participation rate measures the proportion of all non-institutionalized people, age 16 and older, who are employed or actively looking for work. This ratio increased in 2017, to 60.9%, up from 60.6% in 2016, the highest ratio since at least 1990 (the first year for which data is available).10 This remained lower than the U.S. rate, which increased to 62.9% from 62.8% in 2016.11 A related statistic, the NYC employment/population ratio, measures the proportion of those who are actually employed as a ratio of all non-institutionalized people age 16 or older. After remaining virtually unchanged between 2009 and 2012, the rate rose for the sixth consecutive year, up 0.6 percentage points in 2017, from 57.5% in 2016 to 58.1% in 2017. This is the highest ratio since at least 1990 (the first year for which data is available). The U.S. employment/population ratio also rose in 2017, rising 0.4 percentage points from 2016 to reach 60.1%.

Wage Data

This report also examines wage data of employees working in NYC (regardless of where they live). Highly accurate wage data can be derived from the NYS



Department of Labor's Quarterly Census of Employment and Wages (QCEW), though the analysis is limited by the fact that there is a significant lag time in the reporting of wage data. The most recent annual numbers cover the 2016 calendar year and show a slight increase in nominal wages (wages in current dollars), but a decline in "real" wages (wages adjusted for inflation). "Real" wages decreased by 0.9% in 2016, following an increase of 1.1% in the prior year. "Real" wages fell from \$86,709 in 2015 (in 2016 dollars) to \$85,967 in 2016, despite wages rising in most sectors (but falling in the two highest paid sectors). Nominal wages increased by 0.2% over the same time period, following a 1.2% increase in the prior year.

QCEW data is submitted by employers quarterly to New York State and released to the public approximately six months later. Due to this lag time, as of the publication of this report QCEW data is current only through the third quarter of 2017 (note that 2017 data is preliminary). In order to present the most recent statistics possible, staff has formulated a "year" of QCEW data that comprises the four most recent quarters (in this case, the fourth quarter of 2016 through

the third quarter of 2017). This "year" was then compared with the equivalent period of the preceding "year," which in this most recent time period showed that overall wages increased by 0.03% in real terms and by 2.0% in nominal terms. This compares to increases in the preceding 12-month period of 0.1% in real terms and 1.0% in nominal terms. (See Appendices E.3 and E.4, and graph on the previous page.)

Wages in the Finance and Insurance sector, which account for just over a quarter of all wages in the NYC QCEW (and therefore carry more weight than any other single sector), increased by a "real" 2.8% during the most recent 12-month time period, the largest proportional increase of any sector. This compares to a decline of 4.6% in the prior 12-month period. The sector with the second greatest weight, Administrative, Waste, Educational, and Health Services (accounting for 16% of all wages), fell by a "real" 1.7% during this time period. Professional and Technical Services (accounting for 14% of all wages) fell by a "real" 0.04%. The Government sector, with 10% of all wages, rose by 1.0% in real terms. The greatest proportional decrease in "real" wages was in the Management of Companies sector, which declined 3.8%, but accounts for only 3% of all wages. (See Appendices E.3 and E.4 for more detailed wage data.)

On a quarterly basis, "real" wages as reported by the QCEW rose by 3.3% in the first quarter of 2017, and rose 0.5% in the second quarter. However, wages fell a "real" 1.6% in the third quarter. "Yearly" wage growth also includes the fourth quarter of 2016, when wages fell 2.8% in real terms.

"Yearly" QCEW wage growth was impacted most by the growth of the Finance and Insurance sector, which helped pull overall wages moderately higher than they would have grown otherwise. If the Finance and Insurance sector were removed from the analysis, wages would have fallen by 0.3% in real terms, compared to the previously noted growth of 0.03% overall.

The U.S. Bureau of Labor Statistics also tracks wage data, as part of their Current Employment Statistics (CES) survey.¹³ While both data sets track wages, they differ in their methodologies. Unlike the QCEW, which is based on quarterly tax filings of all employers in New York State, the CES is a monthly

survey of approximately one-third of employers conducted by the U.S. Bureau of Labor Statistics. CES data cannot be analyzed for specific industries (and does not include wages for government employees), and while more current than that of the QCEW, is based on a much smaller sample size. In addition, the CES data does not include certain monetary compensations that are included in the QCEW, such as bonuses and sums received when exercising stock options, so is therefore less variable on a quarterly basis than data from the QCEW.

According to the CES survey, weekly wages rose by a "real" 1.3% in NYC in 2017, higher than the rate of growth in 2016 (a decline of 0.7%) and also higher than that of the nation as a whole in 2017 (an increase of 0.7%). In nominal terms, weekly wages rose by 3.3% in NYC and 2.8% for the nation as a whole between 2016 and 2017. On a quarterly basis, the CES data shows that NYC weekly wages (in real terms) rose in each quarter of 2017, by the most in the second quarter (2.0%) and by the least in the first quarter (0.1%).

Bankruptcy Statistics

Staff examined bankruptcy filings for NYC residents from 2000-2017. Between 20,000 and 30,000 persons filed for personal bankruptcy annually between 2000 and 2004, before surging to 42,852 in 2005 as bankruptcy laws were set to change. In the following year, with new laws in place making it more difficult to file for bankruptcy, only 7,961 persons filed for personal bankruptcy, an 81.4% decline. Filings then increased every year through 2010, reaching a high of 17,685, before generally starting to decline. Between 2016 and 2017, personal bankruptcy filings rose 12.4% among New York City residents, to reach 9,775, the highest level since 2013. Filings in the U.S. as a whole declined for the seventh consecutive year, by 0.6%.¹⁴

Poverty Statistics

The most recently available data from the Census Bureau's *American Community Survey (ACS)* reports that the NYC poverty rate for all individuals was 18.9% in 2016, 1.1 percentage points lower than the rate of

20.0% in 2015. This compares to 14.0% for the nation as a whole, a decline from 14.7% in 2015. Poverty rates vary widely depending on borough. Rates range from a low of 13.2% in both Queens and Staten Island, to 17.3% in Manhattan, 20.6% in Brooklyn, and 28.7% in the Bronx, consistently the highest rate of the boroughs. As compared to the prior year, rates fell in every borough, by as much as 1.8 percentage points. (See Appendix E.8.)

Also reported are poverty rates by age. The poverty rate for persons under the age of 18 in NYC was 26.6% in 2016. The rate was 16.5% for individuals 18 to 64 and 18.4% for persons 65 years and over. For families, 15.5% were living under the poverty line in 2016. This includes 22.1% of families in rental units (the lowest proportion since at least 2005, the first year for which data is available) and 4.6% of families in owner-For families containing related occupied units. children under the age of 18, the figure is higher than that of all families, 22.1%. For married-couple families, the overall poverty rate was 9.7% in 2016, while for female- and male-headed families (i.e., no spouse present) it was 27.6% and 15.1%, respectively. Rates for every category but persons aged 65 or older fell as compared to the prior year, by as much as 2.2 percentage points.

The Census Bureau has also begun work on a "Supplemental Poverty Measure," an additional measure of poverty that will include more factors in estimating income resources. 16 Using a similar methodology, the NYC Center for Economic Opportunity (CEO) calculated household poverty rates for NYC residents from 2005-2015 and found poverty rates higher than the official rates released by the Census Bureau. 17 For instance, the official household poverty rate in 2015 was 18.4% and the CEO estimate was 19.9%. The gap between official and CEO estimates has been as high as 3.0 percentage points over the 11 years studied by the CEO.

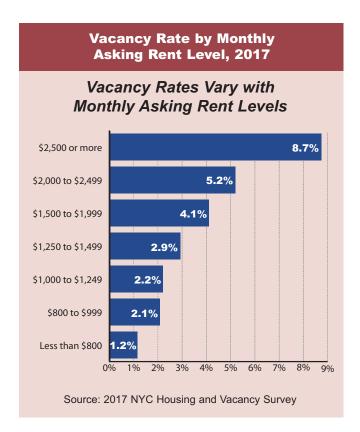
2017 Housing & Vacancy Survey

Vacancy Rates

Preliminary results from the 2017 Housing and Vacancy Survey (HVS) were released in February of

this year, and they reveal the continuation of a very tight New York City housing market.¹⁸ This triennial survey of the housing and demographic characteristics of the City's residents found that the Citywide vacancy rate was 3.63% in 2017, well below the 5% threshold required for rent regulation to continue under State law, but higher than that found during the last HVS, 3.45%.¹⁹ The Bronx had the lowest vacancy rate in the City, at 2.71%, translating into the availability of just 10,558 rentals in a borough with 389,310 rental apartments. Manhattan, by contrast, had the highest vacancy rate in 2017, at 4.73%. Of the remaining boroughs, Brooklyn had a vacancy rate of 3.28%, Queens was at 3.50%, and the small sample size in Staten Island made the rate too inaccurate to report.

The *HVS* found vacancy rates varying significantly among different asking rents. As might be expected, apartments renting for the least had the lowest vacancy rates, while those apartments renting at the high end had substantially higher vacancy rates. Apartments with an asking rent of less than \$800 had a vacancy rate of just 1.15%, while those renting for at least



\$2,500 had a vacancy rate of 8.74%. (See graph on the previous page for a further breakdown.)

Income

According to the *2017 HVS*, which reflects household income for 2016, the median income for rental households was \$47,200, an inflation-adjusted ("real") increase of 10.9% from 2013.²⁰ Owner households earned substantially higher income, which in 2016 was a median of \$87,000, almost double the income of renters, and a "real" increase of 6.0% from 2013.

The 2017 HVS found different income levels among those living in units that were rent controlled, rent stabilized, unregulated, or part of some other regulation program (such as public housing or Mitchell-Lama). The lowest median income was found among those tenants in "other" regulated units, which at \$18,792 was a "real" increase of 0.1% from 2013. Those in rent controlled units had a median household income of \$28,260 in 2016, a "real" decrease of 5.0%. Tenants living in stabilized buildings built prior to 1947 ("pre-war") had a median income of \$42,000, and post-46 ("post-war") tenants earned a median income level of \$50,000, "real" increases of 2.4% and 6.0%, respectively. Stabilized tenants on the whole had a median income of \$44,560 (a "real" increase of 7.0%), while those tenants in unregulated²¹ apartments earned a median of \$67,000 in 2016 (a "real" increase of 12.6%).

Rent

The *HVS* also examines rent levels, and it revealed that in 2017, the median monthly contract rent, which excludes any additional tenant payments for fuel and utilities, for all rental units was \$1,337, an inflation-adjusted ("real") increase of 8.1% from 2014. Rent stabilized tenants on the whole paid less (\$1,269) in median contract rent, including \$1,225 for pre-war rent stabilized apartments, and \$1,400 for post-war rent stabilized apartments. These are "real" increases from 2014 of 2.6% for rent stabilized units as a whole, and 3.1% and 4.5% for pre- and post-war units, respectively. Among the other categories of rental units, rent controlled tenants paid a median of \$915 (a

1.4% "real" decrease), tenants living in unregulated rentals paid a median of \$1,700 (a "real" increase of 10.0%), and tenants living in "other" regulated units (such as public housing and Mitchell-Lama) paid the least in median contract rent, \$610 (a "real" increase of 1.5%).

Median gross rent, which includes fuel and utility payments, was \$1,450 for all renters, a "real" increase of 6.2%. Rent stabilized tenants on the whole paid a median gross rent of \$1,375 in 2017, including \$1,343 for pre-war rent stabilized apartments, and \$1,485 for post-war rent stabilized apartments. Adjusting for inflation, that is an increase from 2014 of 2.6% for all rent stabilized units over the three-year period, and increases of 2.9% and 2.0%, respectively, for pre- and post-war rent stabilized units. Rent controlled tenants paid less than the average rent stabilized tenant, with a median gross rent of \$1,039 in 2017 (a "real" decrease of 1.2%), while those in unregulated units paid the most, a median of \$1,830 (a "real" increase of 9.3%). Those in "other" regulated units paid the least, a median of \$649 in gross rent (a "real" increase of 5.8%).

The *HVS* also breaks down the distribution of renter occupied housing by gross rent level. Of the more than two million rental units in New York City that report cash rent, 6.4% rent for less than \$500, and



14.1% rent for between \$500-\$999. The vast majority of rental units (79.6%) rent for over \$1,000, including 25.2% that rent for more than \$2,000.²² (See graph on the previous page for a further breakdown.)

Affordability of Rental Housing

Generally, housing is considered affordable when a household pays no more than 30% of its income in rent.²³ The 2017 HVS reported that the median gross rent-to-income ratio for all renters was 33.7%, meaning that half of all households residing in rental housing pay more than 33.7% of their income in gross rent, and half pay less. This is the third consecutive survey in which the median gross rent-to-income ratio has remained virtually unchanged, declining just 0.1 percentage points from both 2011 and 2014. Furthermore, a third (32.4%) of rental households pay more than 50% of their household income in gross rent (down from 33.5% in 2014). The contract rent-toincome ratio was 31.3% for all renters in 2017, up 0.1 percentage points from 2014, and the highest ratio ever reported by the HVS.

Rent stabilized tenants report a median gross rent-to-income ratio of 36.0%, meaning a majority of rent stabilized tenants are not able to afford their apartments, based on the U.S. Department of Housing and Urban Development (HUD) benchmark for housing affordability. This figure includes those tenants in pre-war apartments, who are facing a median rent burden of 36.8%, while tenants in postwar units had a median ratio of 34.4% in 2017. Ratios decreased 0.4 percentage points for rent stabilized tenants as a whole, 0.2 percentage points for tenants in pre-war units, and 0.3 percentage points in postwar units from 2014.

It is important to note that an analysis done by RGB staff of the last four triennial *HVS* surveys found that officially reported rent-to-income ratios were somewhat high due to an anomaly in the way rents for tenants receiving Section 8 are recorded by the *HVS*. While generally paying no more than 30% of their income towards rent, tens of thousands of rent stabilized tenants receiving Section 8 are recorded with gross rent-to-income ratios in excess of 100%. The RGB analysis of *2014 HVS* data found that the

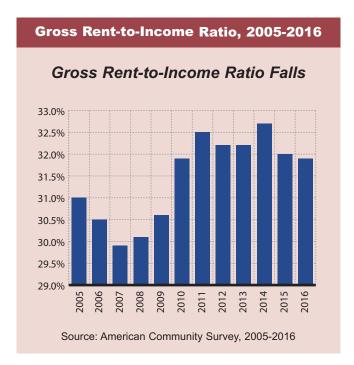
gross rent-to-income ratio for rent stabilized tenants not receiving Section 8 was 33.5%, a difference of 2.7 percentage points from overall rent stabilized rates. Similarly, rates were lower by 1.2 percentage points in 2005, 1.1 percentage points in 2008, and 2.2 percentage points in 2011. The estimated "out of pocket" rent-to-income ratio for rent stabilized tenants in 2014 was 33.2%. Full 2017 HVS data has not been released as of the publication of this report, so a similar analysis cannot be undertaken at this time.

Rent controlled tenants had a median gross rent-to-income ratio of 43.1% (a 7.6 percentage point rise), unregulated tenants paid a median of 31.4% in 2017 (a decrease of 1.6 percentage points), and tenants in "other" regulated units paid a median of 33.8% (an increase of 3.5 percentage points).

Other Measures of Income & Affordability

American Community Survey

In addition to the triennial *HVS*, the Census Bureau also publishes an annual study, the *American Community Survey (ACS)*. Unlike the *HVS*, the *ACS* cannot provide data specifically for rent stabilized tenants, but does provide in-depth data on rents and





incomes for renters as a whole. According to the most recent survey, the *2016 ACS*, NYC's median gross rent-to-income ratio ranks 27th highest among 83 big cities (those with populations of at least 250,000).²⁴ At 31.9%, the median gross rent-to-income ratio in NYC fell 0.1 percentage points from 2015 levels (see graph on previous page). By borough, rates ranged from a low of 28.1% in Manhattan, to 32.3% in Brooklyn, 33.2% in Queens, 33.8% in Staten Island, and 34.9% in the Bronx. This ratio fell in both the Bronx and Manhattan as compared to the prior year (by 0.7 and 0.8 percentage points, respectively), while rising moderately in both Brooklyn and Queens (by 0.2 percentage points in each borough) and more rapidly in Staten Island (rising 1.2 percentage points).

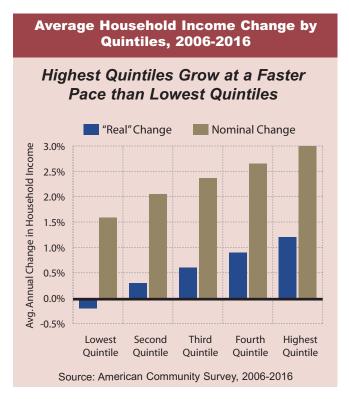
The proportion of households Citywide paying 50% or more of their income towards gross rent fell slightly as compared to 2015, decreasing from 29.5% to 29.3%. At the borough level, rates ranged from a low of 23.2% households paying at least 50% of their income towards gross rent in Manhattan, to a high of 33.6% of households in Staten Island.

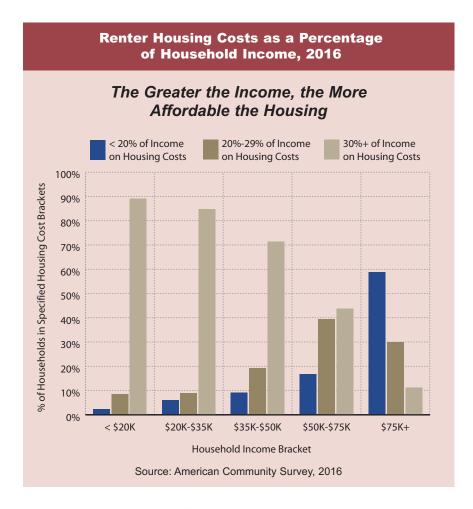
This survey also reports that the median contract rent in NYC was \$1,235 in 2016, and the median gross rent was \$1,351 (see graph above). Between 2015 and 2016, median monthly contract rents for all apartments

in NYC increased an inflation-adjusted ("real") 1.9% and median gross rents increased by 1.5%. In nominal terms the increases were 3.0% and 2.6%, respectively. Inflation-adjusted gross rents rose by 0.2% in Queens, 1.0% in the Bronx, 2.0% in both Manhattan and Staten Island, and 3.6% in Brooklyn.

During 2016, median household income rose both nominally and in real terms, by 5.6% and 4.4% respectively, to \$58,856. Median household income for renters rose by a greater proportion than that of owner households, rising by a "real" 4.6% and 1.1%, respectively. Since the inception of this survey in 2005, renter income has fluctuated in real 2016 dollars from a low of \$40,284 in 2011 to a high of \$45,753 in 2016.

The survey also provides average household income for cities in quintiles. In NYC the top quintile (i.e., the top 20%) in average household income makes 27.49 times more than the lowest quintile (i.e., the lowest 20%), the sixth highest ratio among big cities, and an increase from 27.20 in 2015. While New York's income disparity ratio does rank near the top nationwide, it lags behind Washington, DC, with a ratio of 35.85, the highest disparity among big cities. Other major cities, such as Los Angeles (22.98), Chicago (23.74), Houston (19.91), and Philadelphia





(26.50), all have smaller differentials between income levels than NYC. Not including the aforementioned Washington, DC, the cities ranking higher than NYC are Atlanta, Boston, New Orleans, and Miami, which have ratios ranging from between 28.11 and 32.95. The smallest disparity among big cities is in Aurora, Colorado, with a ratio of 8.73. For the U.S. as a whole, the ratio is 16.54, a slight increase from the 16.34 ratio in 2015. While the ratio between the upper and lower quintiles was 27.49 for all of NYC, it was 43.36 in Manhattan, where the top quintile makes an average of almost \$437,000 more annually than the lowest quintile.

Looking at household income by quintiles can also provide an insight into how quickly or slowly income in each of the categories is growing over time. While not necessarily true in each individual year, over the time period of 2006-2016 (the earliest and latest time periods available for analysis), income grew at faster pace for those in the higher quintiles

versus those in the lower quintiles. Point to point comparisons show that for the lowest quintile (the bottom 20% of income levels), household income fell 1.9% in inflation-adjusted ("real") terms, and rose by 17.0% in nominal terms from 2006 to 2016. For those households in the highest quintile (the top 20% of income levels), household income in 2016 rose 12.6% in "real" terms and 34.3% in nominal terms, as compared to 2006. Looking at the change in income on a year-to-year basis between 2006 and 2016, in real terms household income fell by an average of 0.2% each year for the lowest quintile and rose by an average of 1.2% annually for the highest quintile (see graph on previous page).

Also reported is the percentage of income spent on monthly housing costs for different household income categories. Approximately 95% of all renters

report both paying rent and earning income, and among those renters, 24% make less than \$20,000 a year. For this lowest household income category, 89.1% spend at least 30% of their household income on housing costs and 2.4% spend less than 20%. As income levels increase, the proportion of renters who spend at least 30% of their household income on housing costs decreases, while the proportion paying less than 20% increases (see graph on this page). At the highest income category provided by the *ACS*, those households earning \$75,000 or more (33.1% of all renters), 11.2% spend at least 30% of their income on housing costs, while 58.9% spend less than 20%.

Consumer Price Index

One of the many prices tracked in the federal Consumer Price Index (CPI) is the cost of rental housing. While not specific to NYC (the local CPI

area extends into the suburbs of the City), the CPI can provide a useful comparison of the rise of housing costs to those of other components of the price index.²⁵ For the 49-year period since the inception of rent stabilization (from 1968 to 2017) the cost of rental housing in the New York area rose 801% and overall prices rose more slowly, at 644%. Over this same time period, in the U.S. as a whole rent and overall prices rose at roughly the same rate, by 612% and 604%, respectively.

In 2017, rental costs rose 2.5% in the NYC area, versus an overall increase in the CPI of 2.0%. This is lower than the 2016 rent increase of 3.4% and is the lowest proportional increase in the NYC area since 2012.

In the U.S. as a whole, rental costs rose at a faster pace than the NYC area, rising by 3.8% in 2017. Rental costs in the NYC metropolitan area rose more slowly than six of the seven cities selected for comparison, including the metropolitan areas of Chicago, Boston, Washington, DC, Atlanta, Los Angeles, and San Francisco, where rents rose at rates between 2.6% and 6.0% in 2017. But rental rates in the NYC metropolitan area did rise faster than those in Philadelphia, where rents rose 1.9% in 2017.

New York City Tax Return Filings

In April of 2017, the NYC Independent Budget Office (IBO) released an analysis of New York City tax returns from 2006 through 2014.²⁶ Using a sample of 777,000 personal income tax returns, the IBO analyzed the distribution of adjusted gross income (total pre-tax income after allowable deductions are taken) to see if the distribution of wealth changed during the time period studied. The study found that the median income for the top half of filers rose only minimally in inflation-adjusted terms (from \$64,596 to \$64,730, a 0.2% rise). However, summing the total income reported by this group, the survey found it was 14.8% higher in 2014 than in 2006, even after adjusting for inflation.

Of the additional \$38.3 billion accrued by the top half of filers in 2014 (as compared to 2006), \$28.6 billion was accrued among the top 10%, with \$10.3 billion of this amount accrued among the top 0.1%. Because most of the wealth increase was among the

top earners, the median income among the top half of filers stayed virtually the same.

Among the bottom half of filers, median inflation-adjusted income dropped from \$14,153 in 2006 to \$12,360 in 2014 (a 12.7% drop). The sum of total income for this group fell by a greater proportion, falling 14.8% over the period studied, a cumulative loss of \$3.1 billion in 2014 dollars.

Section 8 Housing Availability

Following increased funding in 2007 to the Section 8 housing voucher program (which allows recipients to live in privately owned housing, paying 30% of their income towards rent), the NYC Housing Authority (NYCHA) opened the waiting list for the first time since These expanded funding levels led to significant increases in the number of Section 8 occupied units funded by NYCHA (which increased from 82,801 in Fiscal Year (FY) 2007 to a recent high of 100,570 in FY 2010, a 21.5% increase), as well as significant increases in the number of people placed through Section 8 vouchers during those years. The number of Section 8 apartments has since fallen, to 84,761 units (the most current data, as of the first four months of FY 2018, and a 0.1% increase from the same period of the prior year).²⁸ NYCHA also tracks the number of applicants newly placed through the Section 8 program. For the third consecutive year, placements rose, rising from 1,706 in FY 2016 to 2,758 in FY 2017. But placements fell in the first four months of FY 2018 as compared to the first four months of FY 2017, from 546 to 458. There are approximately 149,000 persons currently on the NYCHA Section 8 waiting list.

The NYC Department of Housing Preservation and Development (HPD) also maintains a Section 8 program, although as opposed to NYCHA, applicants must fall within specific HPD preference categories or special admission programs, and applications are not accepted from the general public.²⁹ As of March of 2018, HPD was funding 39,958 Section 8 vouchers, approximately the same number as the previous year. Notably, 46.4% of HPD's Section 8 vouchers are utilized by tenants with disabilities. And among all HPD Section 8 rentals, the average tenant

share of rent is \$404, with an average income level of \$16,919.30

Non-Government Sources of Affordability Data

Staff also calculated electricity costs for a typical rental household. Assuming usage of 300 kWh and supply via Con Edison, the average renter's bill would have decreased by 0.08% during 2017, following a 5.5% decrease during 2016. During the most recent 12-month period (April of 2017 through March of 2018), the average bill rose 1.6% as compared to the same time period of the prior year. For comparison, during the previous 12-month period, costs decreased 2.0%.³¹ New Yorkers pay some of the highest electricity bills in the nation, with the average cost per kWh in 2016 just less than two times that of the nation as a whole.³²

Another measure of affordability is the Council for Community and Economic Research's Cost of Living Index (COLI), which tracks the cost of living in almost 300 urban areas, including Manhattan and Brooklyn. Based on 60 different items, the survey collects more than 90,000 prices for housing, utilities, groceries, transportation, health care, and miscellaneous goods and services on a quarterly basis. In the second quarter of 2017, the COLI found that Manhattan and Brooklyn ranked as numbers one and four, respectively, on the list of most expensive urban areas.³³ The study calculated that Manhattan was approximately 2.4 times as expensive to live in as the national average, while Brooklyn was approximately 1.8 times more expensive.

Another quarterly index, the Housing Opportunity Index (HOI), showed that during the fourth quarter of 2017 the New York metropolitan area was the twentieth least affordable area (of 238 HUD-defined metro areas) to buy a home, down from seventeenth in the fourth quarter of 2016. This follows eighteen straight quarters between 2008 and 2012 when the New York area ranked as least affordable. The survey found that 32.7% of owner-occupied housing in the metropolitan area was affordable to households earning the median income. Although it was one of the least affordable buyer's markets, substantially more

homes were affordable than in recent years, such as in the fourth quarter of 2006, when only 5.1% of homes were considered affordable. However, the fourth quarter of 2017 was less affordable as compared to the same quarter of the previous year, when 35.4% of homes were considered affordable.³⁴

Every year the National Low Income Housing Coalition (NLIHC) issues a study to determine whether rents are affordable to the lowest wage earners. The 2018 study has not been released as of the publication of this report, but in line with their methodology, 35 in order to afford a two-bedroom apartment at the City's Fair Market Rent, (\$1,789 a month, as determined by HUD³⁶) a full-time worker must earn \$34.40 per hour, or \$71,560 a year. Alternately, those who earn minimum wage would have to work 106-115 hours a week (or two persons would each have to work 53-57.5 hours a week) to be able to afford a two-bedroom unit priced at Fair Market Rent. Because the Fair Market Rent rose by \$152, but the minimum wage increased by \$1.50-\$2.00 an hour in 2018 (depending on the size of the employer), the amount of annual wages necessary to afford this apartment went up by 9.3%, but the number of hours working at minimum wage in order to afford this apartment went down by 4.4%-7.5%. Over the last ten years the number of hours working at minimum wage needed to afford a two-bedroom apartment at the current Fair Market Rent has ranged from a high of 156 in 2013, to a low of 106-115 in 2018.

Real Property Tax Credit

For the fourth consecutive year, a tax credit for NYC renters, the "Enhanced Real Property Tax Credit for Homeowners and Renters," offers a maximum tax credit of \$500 to NYC residents with household incomes of less than \$200,000 a year.³⁷ The amount of this credit depends on both income level and the amount of rent paid. For instance, a tenant with a household income of \$50,000 a year, who pays \$1,250 in rent (30% of their income), would receive a tax credit of \$16.31. But a tenant making \$50,000 a year and paying \$2,083 in rent (50% of their income), would receive a credit of \$87.19. A higher income household, earning \$100,000 a year, would need a

rent in excess of \$2,646 (31.7% of their income) before they could receive any tax credit.³⁸

Cash Assistance Programs

For just the second time in the past nine years, the average number of cash assistance cases in NYC decreased, falling by 1.1% in 2017 to reach 366,324 cases.³⁹ This follows an increase of 2.4% in the prior year (see graph below). Also reported by the NYC Human Resources Administration is the number of unduplicated recipients of cash assistance during 2017. Over the course of the year, a total of 596,876 persons received a cash assistance payment, a decrease of 1.4%. This figure includes more than 102,000 cases of emergency assistance, a 6.9% decrease from 2016. One-time emergency grants (known as "one shots") can help pay for expenses like

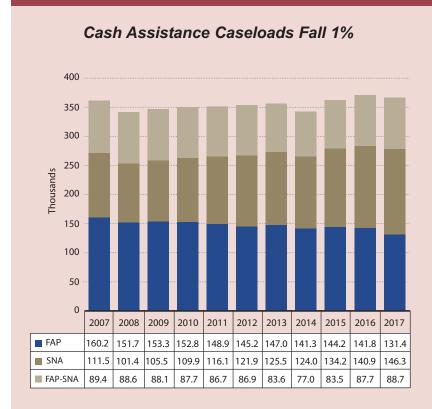
rent arrears.⁴⁰ And despite generally increasing in the past few years, over the last two decades the number of cash assistance recipients has dropped significantly, falling 68.3% since March 1995, when the City's welfare reform initiative began and 1,161,000 recipients were on the rolls.

The number of applications for cash assistance also fell in 2017, decreasing 2.4% over 2016 levels, including a decrease of 3.5% in denied applications, and 1.7% in approved applications.⁴¹ At the same time, the number of reported job placements among cash assistance recipients decreased during 2017, falling by 15.5%, or 7,357 jobs.⁴²

The number of Supplemental Nutrition Assistance Program (SNAP, formerly known as food stamps) recipients decreased for the fourth consecutive year, by 1.5% in 2017, to an average of 1.67 million. Despite this drop, SNAP levels have more than doubled in

recent years, rising from an average of just over 800,000 in the early 2000s, to almost 1.7 million today.⁴³ The number of Medicaid enrollees also fell, decreasing 10.6% during 2017, to 1.86 million recipients.⁴⁴





Source: NYC Human Resources Administration Note: FAP-SNA refers to welfare recipients who were converted from the Family Assistance Program (FAP) to the Safety Net Assistance Program (SNA)

Housing Policy

NYC receives funding for a variety of housing programs from the U.S. Department of Housing and Urban Development (HUD). NYC was granted \$715.3 million from federally funded programs in FY 2017.⁴⁵ These programs include \$150.3 million in a Community Development Block Grant (CDBG), which funds housing community development programs; \$53.3 million for the HOME Investment Partnership Program, which helps preserve existing housing stock; \$13.5 million for the Emergency Shelter Grant (ESG) program, which is used for homeless programs; \$44.2 million for Housing Opportunities for Persons with AIDS

(HOPWA); and a competitive HUD Continuum of Care (CoC) grant of \$107.5 million for homeless programs. NYCHA will also receive \$346.6 million for its capital modernization program.

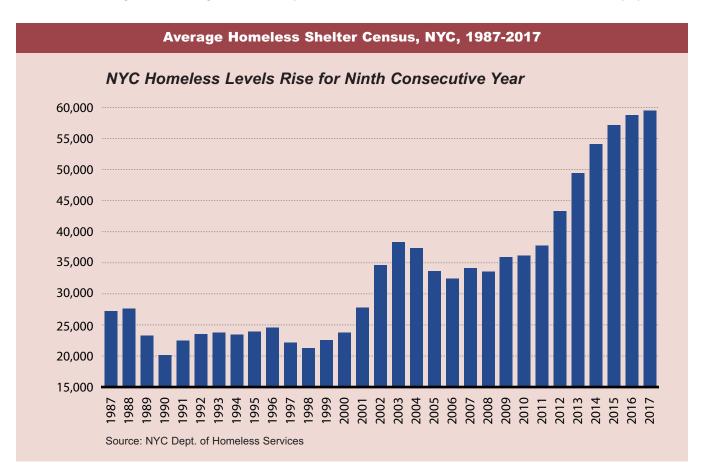
As compared to FY 2016, federal funding in 2017 increased by 1.5% in nominal terms and fell 0.3% in inflation-adjusted ("real") terms. The largest source of funding, for NYCHA capital projects, rose by 6.5% in real terms. The increase in NYCHA funding was the greatest proportional increase over the year, while the greatest proportional decrease was in HUD CoC funding, which declined by 13.4% in real terms.

Homelessness & Evictions

Homelessness

Homelessness in the City, based on data from the NYC Department of Homeless Services (DHS), increased for the ninth consecutive year during 2017, rising by 1.2%.46 Each night, an average of 59,467 persons stayed in DHS shelters during 2017, up 697 persons from a year earlier, and up considerably from the average of 20,000-25,000 found in the 1990s (see graph below and Appendix E.7). The subcategory of the number of families sheltered each day also rose, by an average of 1.6%.⁴⁷ The figure for families includes the number of families with children sheltered each night, which rose 0.6% during 2017 (to reach an average of 12,686), and the number of adult families sheltered each night, which increased 6.6% over the year (to an average of 2,501). The number of single adults sheltered also rose during 2017, increasing 7.0%, to an average of 14,074 persons.

While the number of homeless staying in DHS shelters increased 1.2% during 2017, looking at the data on a quarterly level shows that homelessness increased at a slower pace as the year went on. Levels rose by 3.3%, 1.3%, and 0.2% in the first, second, and third quarters respectively, as compared to the same quarters of the previous year. In the fourth guarter, there was a minimal decrease of the shelter population



as compared to the fourth quarter of 2016, falling 0.01%. On a monthly basis, the greatest increase was seen in January of 2017, when 2,109 more persons stayed in City shelters than the previous January, an increase of 3.6%.

Permanent housing placements for families with children decreased slightly in 2017, falling from 8,680 to 8,612, a 0.8% decrease. Placements also fell for both adult families and single adults. For adult families, placements fell from 587 in 2016 to 537 in 2017, an 8.5% decline. Permanent housing placements for single adults fell from 8,034 in 2016 to 7,687 in 2017, a 4.3% decline.

Other homeless indicators include the average amount of time spent in temporary housing, which increased for both families with children and single adults, but fell for adult families. For families with children, the average amount of time spent in temporary housing rose 11 days (to 428 days), and rose 26 days for single adults (to 395 days). However, the average went down for adult families, falling 10 days (to 551 days).

DHS also reports the number of homeless persons placed in permanent housing who return to the shelter system within one year. In 2017, 8.5% of families with children returned to DHS shelters within one year (up from 8.0% the prior year); 8.5% of adult families returned (down from 10.4% in the prior year); and 16.3% of single adults returned (down from 17.3% in the prior year).

Data from the U.S. Department of Housing and Urban Development, which asks municipalities to submit homeless counts on a single day in January of each year, show that NYC has the largest number of homeless people of any city in the nation. NYC reported a total of 76,501 sheltered and unsheltered persons in January of 2017, followed by Los Angeles, with 55,188 persons, and Seattle, with 11,643. In NYC, homeless levels rose 4.1% from January 2016 to January 2017, while nationally levels rose by 0.7%.⁴⁸

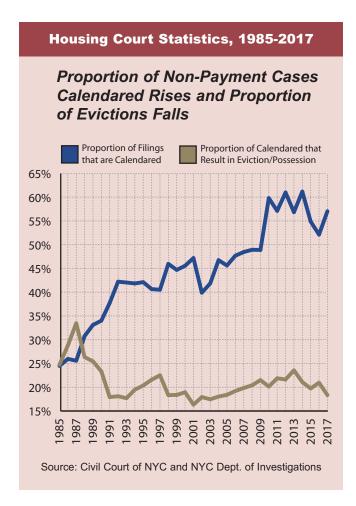
In February of 2017, the de Blasio Administration released "Turning the Tide of Homelessness in New York City," detailing a comprehensive plan to combat the rise in homelessness, including efforts already underway. In part, the report detailed plans to end the use of cluster units (individual apartments in buildings that usually

have rent-paying tenants in other apartments, with limited or no social services on site) and commercial hotels to house homeless persons. approximately 30% of the homeless population, plans call for cluster units and hotels to be replaced with 90 new shelters over the next five years, in addition to the conversion of some cluster units into permanent housing. In December of 2017, the Administration detailed its plans to acquire and rehabilitate cluster site buildings and convert them into permanent affordable housing through long-term regulatory agreements between the owners and HPD.⁵⁰ When voluntary negotiations are unsuccessful, the City may employ eminent domain to take ownership of buildings with a large number of cluster units. In February of 2018, the Administration announced that it had already phased out the use of 1,500 cluster units, or 42% of the total.⁵¹ Another 800 units are in the process of being converted to permanent housing, which will reduce the number of cluster units by at least 60%.

Housing Court

For the sixth consecutive year, non-payment filings in Housing Court decreased, falling 0.4%, to 201,441.⁵² At the same time, the number of non-payment cases resulting in an actual court appearance ("calendared") increased, by 9.0%. Because the number of calendared cases rose at the same time the number of filings fell, the proportion of non-payment cases which resulted in an appearance rose by 4.9 percentage points. At 57.0%, this proportion is one of the highest seen since 1983 (the first year for which data is available). For comparison, during the mid-to-late 1980s, an average of 27.1% of non-payment filings were calendared. (See graph on the next page and Appendix E.6.)

Approximately 20% of both non-payment filings and calendared cases are against tenants of public housing (NYCHA). If these cases were taken out of the analysis, filings against non-NYCHA tenants would have fallen 1.8% between 2016 and 2017, and calendared cases would have risen by 11.3%. The percentage of calendared cases to non-payment filings in 2017 among non-NYCHA tenants is 57.5%, 0.4 percentage points higher than the overall proportion.



Evictions of tenants fell during 2017, by 4.6%, following an increase of 0.5% in the prior year, and a decline of 18.1% in 2015.53 The proportion of nonpayment proceedings Citywide that resulted in an eviction/possession ruling in 2017 decreased by 2.6 percentage points, falling from 21.0% to 18.3%. This translates to 21,074 court decisions ruling for the tenant's eviction from a total of 114,879 non-payment proceedings calendared (see graph on this page).

In August of 2017, a City bill granting all households under 200% of the federal poverty level eligibility for free legal representation in Housing Court was signed into law. An additional \$93 million will be added to programs in place since 2014, for a total funding level of \$155 million a year by FY 2022. It is estimated that since 2014 more than 50,000 households have received legal help and the number of tenants in Housing Court with legal representation has risen from 1% to 27% (as of 2016).54 The NYC

Human Resources Administration reports that the number of cases in Housing Court that received legal representation in FY 2017 rose 41.1% over FY 2016 levels (to reach 16,702) and during the first four months of FY 2018 there was a 28.4% rise as compared to the same period of the previous year (to reach 6,477 cases).⁵⁵ The program also now helps represent NYCHA tenants during administrative hearings brought by that agency to end a resident's tenancy.⁵⁶

Summary

In 2017, many economic indicators for NYC were positive, including rising employment levels, declining unemployment, increased Gross City Product, and a slowing of Housing Court non-payment filings, public assistance caseloads, and SNAP recipients. However, homelessness continues to increase, the vacancy rate remains low, and inflation-adjusted wages were stagnant for the second consecutive year.

Looking forward, both the NYC Comptroller's office and the NYC Office of Management and Budget have made predictions about the future health of the NYC economy. Among the predictions, they estimate that in 2018 the City will gain anywhere between 47,000 and 55,000 jobs, unemployment will fall to 4.4%, GCP growth will potentially grow anywhere from 3.1% to 3.3%, and wages will rise from 3.9% to 4.1%. They also see the economy as strong, but slowing, during the next few years, with increasing unemployment rates (to as high as 6.3% in 2022), more moderate job gains and GCP growth, and slowing wage rate growth.⁵⁷

Endnotes

- 1. This data is obtained from the Civil Court of the City of New York, which cannot provide exact "quarterly" data. The Court has 13 terms in a year, each a little less than a month long. This data is for terms 10-13, which is from approximately the middle of September through the end of the year. It is compared to the same period of the prior year.
- See Endnote 1.
- 3. Data from the NYC Comptroller's Office as of March, 2018. GCP figures are adjusted annually by the NYC Comptroller's Office. The figures in this report are the latest available estimate from that office, based on inflation-adjusted 2009 chained dollars.

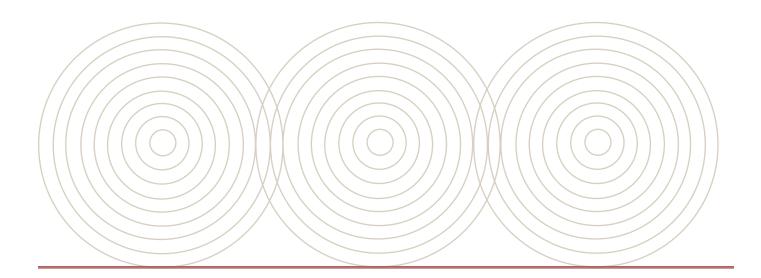
- U.S. Bureau of Economic Analysis. http://www.bea.gov/national/ index.htm#gdp; Data accessed March, 2018.
- U.S. Bureau of Labor Statistics; http://www.bls.gov; Data accessed February, 2018.
- NYS Department of Labor; http://www.labor.state.ny.us; Data accessed March 2018. Data is revised annually and may not match data reported in prior years.
- U.S. Bureau of Labor Statistics; http://www.bls.gov; Data accessed March, 2018.
- 8. U.S. Bureau of Labor Statistics; http://www.bls.gov; Data accessed March, 2018.
- New York State Department of Labor; http://www.labor.state.ny.us; Data accessed March 2018. Data is revised annually and may not match data reported in prior years.
- 10. The NYC labor force participation rate and employment/population ratio are derived from unpublished data from the U.S. Bureau of Labor Statistics, obtained from the NYC Comptroller's Office. Note that prior years' data are annually revised, and may differ from figures reported in prior years' *Income and Affordability Studies*.
- U.S. Bureau of Labor Statistics; http://www.bls.gov; Data accessed March, 2018.
- New York State Department of Labor; http://www.labor.state.ny.us;
 Data accessed March 2018.
- U.S. Bureau of Labor Statistics; http://www.bls.gov; Data accessed March, 2018.
- Data obtained from The Administrative Office of the U.S. Courts in March of 2018. http://www.uscourts.gov/statistics-reports/caseloadstatistics-data-tables
- 15. Poverty statistics were researched on the U.S. Census Bureau's Factfinder Site: http://factfinder2.census.gov in February of 2018. The U.S. Census Bureau reports that in 2016 the weighted average poverty threshold for a one-person household is \$12,228; \$15,569 for a two-person household; \$19,105 for a three-person household; \$24,563 for a four-person household; \$29,111 for a five-person household; \$32,928 for a six-person household; \$37,458 for a seven-person household; \$41,781 for an eight-person household; and \$49,721 for a nine-person or more household.
- 16. U.S. Census Bureau; https://www.census.gov/newsroom/blogs/random-samplings/2017/09/what_is_the_suppleme.html
- "New York City Government Poverty Measure, 2005-2015." May, 2017. NYC Center for Economic Opportunity. Note that the CEO poverty rates are adjusted periodically and may not match figures found in prior reports.
- 18. The New York City Housing and Vacancy Survey (HVS) is sponsored by the NYC Department of Housing Preservation and Development (HPD) and conducted by the U.S. Census Bureau. All HVS data reported herein is from "Selected Initial Findings of the 2017 New York City Housing and Vacancy Survey," prepared by HPD. Full data should be available no later than June of 2018.
- State law requires the City to formally extend rent stabilization every three years, after publication of vacancy rates from the triennial *Housing and Vacancy Survey*. NYC Introductory Number 0600-2018 extends rent stabilization until April 1, 2021.
- Total household income in the HVS includes wages, salaries, and tips; self-employment income; interest dividends; pensions; and other transfers and in-kind payments.

- 21. Private non-regulated units consist of units which were never rent controlled or rent stabilized, units which were decontrolled, and unregulated rentals in cooperatives or condominium buildings.
- 22. There were 65,223 units which did not report a cash rent because they were being occupied rent-free.
- 23. The HUD benchmark for housing affordability is a 30% rent-to-income ratio. Source: Basic Laws on Housing and Community Development, Subcommittee on Housing and Community Development of the Committee on Banking Finance and Urban Affairs, revised through December 31, 1994, Section 3.(a)(2).
- 24. 2016 American Community Survey, U.S. Census Bureau. http://factfinder2.census.gov. American Community Survey data does not specifically identify rent stabilized units.
- 25. U.S. Bureau of Labor Statistics; http://www.bls.gov; Data accessed February, 2018.
- "How Has the Distribution of Income in New York City Changed Since 2006?" NYC Independent Budget Office. April, 2017.
- 27. Press Release, Mayor's Office. "Mayor Bloomberg and NYCHA Chairman Hernandez Announce that Section 8 Voucher List Will Open For First Time in Twelve Years," January 29, 2007.
- Preliminary FY 2018 Mayor's Management Report, NYC Housing Authority section. The City's Fiscal Year runs from July 1 through June 30 of each year.
- Eligibility guidelines via the NYC Housing Preservation and Development website: http://www1.nyc.gov/site/hpd/section-8/applicants-eligibility.page.
- DTR Section 8 General Program Indicators, HPD website: http://www1.nyc.gov/assets/hpd/downloads/pdf/hpd-section-8-program-statistics.pdf (dated 3/8/2018).
- 31. A typical bill was calculated using rate schedules published on the Con Edison website at http://www.coned.com/rates. The rates used were for Service Classification #1, Residential and Religious, at a usage rate of 300kWh, according to averages stated by a representative from ConEd.
- U.S. Energy Information Administration: Electric Sales, Revenue, and Average Price (2016 Tables T6 and T5.a). http://www.eia.gov/electricity/sales_revenue_price/.
- ACCRA Cost of Living Index Press Release. Second Quarter of 2017. The Council for Community and Economic Research. http://www.coli.org/media
- 34. National Association of Home Builders. Various tables on website: http://www.nahb.org/en/research/housing-economics/housing-indexes/housing-opportunity-index.aspx; Affordability defined as no more than 28% of gross income spent on housing costs. Data accessed March 2018.
- The methodology that the National Low Income Housing Coalition uses is at: http://nlihc.org/sites/default/files/oor/ OOR_2017.pdf
- Fair Market Rents are published annually by the U.S. Department of Housing and Urban Development. http://www.huduser.org/datasets/fmr.html
- New York State Department of Taxation and Finance Form NYC-208 (2017).
- Calculations based on New York State Department of Taxation and Finance Form NYC-208 (2017).

- 39. NYC Human Resources Administration. HRA Charts (Cash Assistance Recipients): http://www1.nyc.gov/site/hra/about/facts.page#charts
- 40. NYC Human Resources Administration. HRA Monthly Fact Sheets (December 2017): http://www1.nyc.gov/site/hra/about/facts.page#caseloads
- 41. Data directly from the NYS Office of Temporary and Disability Assistance, March, 2018.
- 42. NYC Human Resources Administration. HRA Charts (Assisted Entries to Employment): http://www1.nyc.gov/site/hra/about/facts.page#charts
- 43. NYC Human Resources Administration. HRA Charts (SNAP Recipients): http://www1.nyc.gov/site/hra/about/facts.page#charts
- 44. NYC Human Resources Administration. HRA Charts (HRA Administered Medicaid Enrollees): http://www1.nyc.gov/site/hra/about/facts.page#charts
- 45. U.S. Department of Housing and Urban Development.
- 46. Data from the Policy & Planning Office of the NYC Department of Homeless Services (DHS), DHS daily reports, and monthly Citywide Performance Reporting reports. Note that in addition, the NYC Department of Housing Preservation and Development, the NYC Department of Youth and Community Development, and the NYC Human Resources Administration also operate emergency shelters, which house approximately 5,000 persons per night, which is not included in the totals presented in this report.
- 47. The NYC Department of Homeless Services (DHS) now splits families into two groups - families with children and adult families (generally spouses and domestic partners). Approximately 84% of "families" are families with children.
- 48. "The 2017 Annual Homeless Assessment Report (AHAR) to Congress: Part 1, Point-in-Time Estimates of Homelessness." U.S. Department of Housing and Urban Development, December 2017.
- 49. "Turning the Tide of Homelessness in New York City," Mayor's Office, February, 2017.
- 50. Press Release, Mayor's Office. "New Tool to Combat Homelessness: Mayor de Blasio Moves to Convert Cluster Buildings Into Permanent Affordable Housing for Homeless Families." December 12, 2017.
- 51. Press Release, NYC Human Resources Administration. "De Blasio Administration Reduces Cluster Units by 42 Percent." February 26,
- 52. Civil Court of the City of New York data.
- 53. Eviction data from the NYC Department of Investigation, Bureau of Auditors data.
- 54. Press Release, Mayor's Office. "Mayor de Blasio Signs Legislation to Provide Low-Income New Yorkers with Access to Counsel for Wrongful Evictions." August 11, 2017.
- 55. Preliminary FY 2018 Mayor's Management Report, NYC Human Resources Administration section.
- 56. See Endnote 54.
- 57. "Comments on New York City's Preliminary Budget for FY 2019 and Financial Plan for Fiscal Years 2018-2022." NYC Comptroller's Office, March 5, 2018.

Housing Supply

2018 Housing Supply Report pg.	<i>73</i>
Changes to the Rent Stabilized Housing Stock in New York City in 2017pg.	<i>8</i> 7



What's New

- ◆ The Citywide rental vacancy rate was 3.63% in 2017.
- Permits for 22,131 new dwelling units were issued in NYC in 2017, a 36.0% increase over the prior year.
- There was a 3.6% decrease in the number of co-op or condo units accepted in 2017, to 279 plans containing 8,358 units.
- ◆ The number of housing units newly receiving 421-a exemptions increased 363.0% in 2017, to 20,804.
- ◆ The number of housing units newly receiving J-51 abatements and exemptions decreased 33.3% in 2017, to 22,877.
- The number of new housing units completed in 2017 increased 11.1% over the prior year, to 25,839.
- Demolitions were down in 2017, decreasing by 6.9%, to 1,722 buildings.
- City-sponsored programs spurred 24,293 new housing starts in FY 2017, 32% of which were newly constructed units.
- ◆ The City-owned in rem housing stock increased from 125 units in June of 2016 to 323 units in March of 2018. Since 1994, the number of units has declined 99.3%.

Introduction

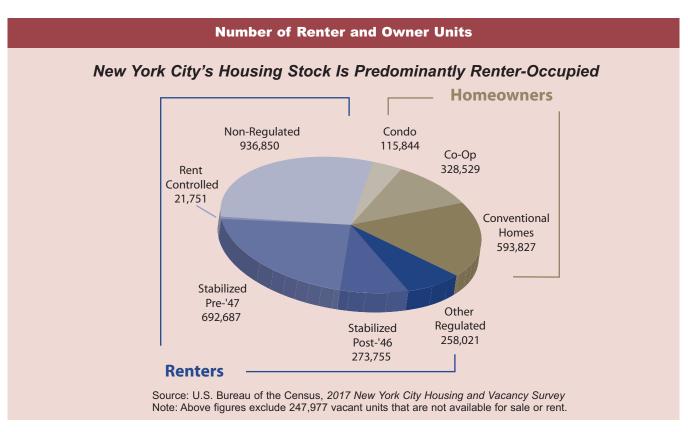
Section 26-510(b) of the Rent Stabilization Law requires the Rent Guidelines Board (RGB) to consider the "over-all supply of housing accommodations and over-all vacancy rates" and "such other data as may be made available to it." To assist the Board in meeting this obligation, the RGB research staff produces an annual *Housing Supply Report*, which reports on current conditions in the housing market, including vacancy and overcrowding rates, new housing production, co-op and condo conversions, demolitions, housing created through tax incentives, and government-sponsored housing starts.

Overview

Between 2016 and 2017 there was a 36.0% increase in the number of permits issued for new housing units, rising to 22,131, following a large decrease in the prior year. Following five consecutive years of decrease, the number of units newly receiving 421-a benefits rose dramatically, increasing 363.0% from 2016 levels. The number of units newly accepted in co-op and condo plans fell slightly, by 3.6%, with the number of plans falling by 1.1%. Rehabilitation of housing units under the J-51 tax abatement and exemption program also declined during 2017, down 33.3%. The number of completed housing units rose during 2017, increasing 11.1% to 25,839 units, while the number of demolitions fell by 6.9% during 2017. As of 2017, a tight housing market also remains in New York City (NYC), with a Citywide rental vacancy rate of 3.63% and 11.5% of all rental housing considered overcrowded.

New York City's Housing Inventory

Most New Yorkers live in multi-family rental housing rather than owning homes. According to the *2017 Housing and Vacancy Survey (HVS)*,¹ rental units comprise 62.9% of NYC's available housing stock, a far greater share than the nationwide average of 36.9%.² NYC in 2017 had a total of 3,469,240 housing units, the largest housing stock since the first *HVS* was conducted in 1965. NYC's housing is not only distinguished by the size of its rental housing stock, but unlike most cities, the bulk of rental units are rent regulated. Of the 2,183,064 occupied and vacant rental units reported in the most recent *HVS*, 42.9% were unregulated, or "free market." The remaining units were rent regulated, including pre-war (pre-47) rent stabilized (31.7%), post-war (post-46) rent stabilized (12.5%), rent controlled (1.0%), or regulated under various other³ types of programs (11.8%). (See pie chart on the following page.)



The *HVS* also indicated that NYC's housing market remains tight, finding a Citywide rental vacancy rate of 3.63% in 2017, below the 5% threshold required for rent regulation to continue under State law. This translates into the availability of just 79,190 vacant units out of almost 2.2 million rental units Citywide. The vacancy rate ranged from a low of 2.71% in the Bronx to a high of 4.73% in Manhattan. The Brooklyn vacancy rate was 3.28%, and the Queens rate was 3.50%. The sample size in Staten Island was too small to permit calculation of an accurate vacancy rate.⁴

Vacancy rates also varied by rent regulation status. Both post-war and pre-war stabilized units had low vacancy rates, at 1.21% and 2.40%, respectively. Stabilized vacancy rates on the whole were 2.06%, while private, non-regulated units were vacant at a 6.07% rate.

The frequency of crowding also varied by rent regulation status. Overall, 11.5% of all rental housing in NYC in 2017 was overcrowded (defined as more than one person per room, on average) and 4.5% was severely overcrowded (defined as an average of more than 1.5 persons per room). Post-war stabilized

housing was more crowded than pre-war, with 13.4% of units overcrowded and 6.6% severely overcrowded, while 12.9% of pre-war units were overcrowded, and 5.1% were severely overcrowded. Overall, 13.1% of rent stabilized housing was overcrowded and 5.5% was severely overcrowded. By comparison, in non-regulated housing, 11.3% was overcrowded and 4.2% severely overcrowded.

Changes in the Housing Inventory

Housing Permits

Housing supply grows in a variety of ways: new construction, substantial rehabilitation of deteriorated buildings, and conversions from non-residential buildings into residential use. The number of permits authorized for new construction is a measure of how many new housing units will be completed and ready for occupancy, typically within three years, depending on the type of housing structure.

In 2017, permits newly issued for housing units rose for the seventh time in the past eight years.

Following a large decrease of 71.2% in 2016 (to 16,269 units), permits were issued in 2017 for 22,131 units of new housing, an increase of 36.0% from 2016.⁵ (See graph on this page.)

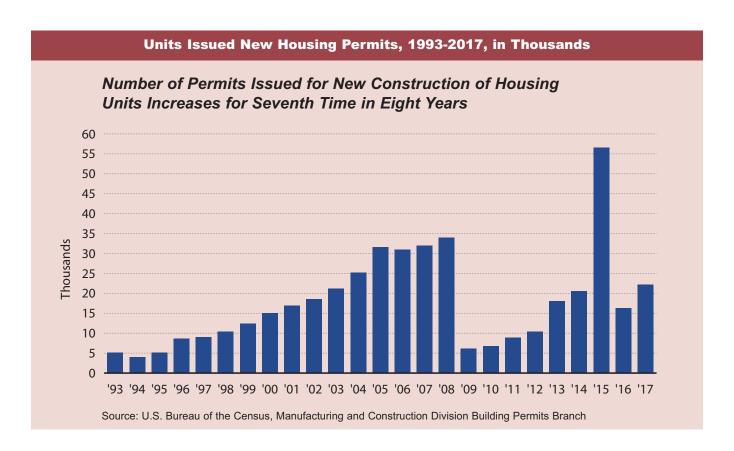
Permits rose by double digits in every borough except Staten Island, where they fell 24.0%, to 685 units. (See Appendix F.1 and the map on the following page.) Permits in Queens rose by the greatest proportion, increasing 79.8%, to 5,104 units. Newly issued permits also rose in Brooklyn, by 36.1% (to 6,130 units); in the Bronx, by 34.9% (to 5,401 units); and by 19.6% in Manhattan (to 4,811 units).

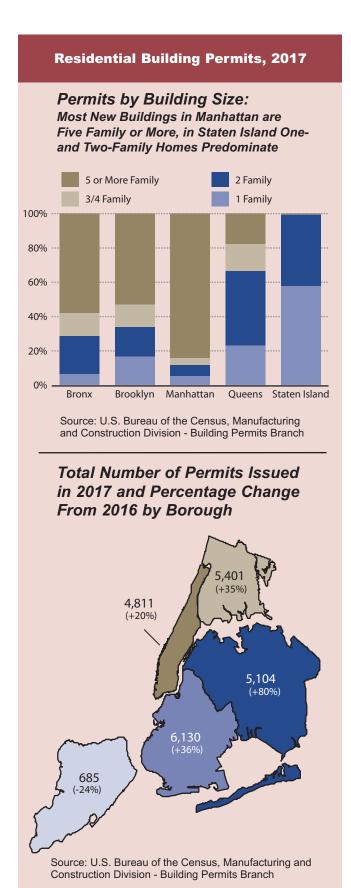
On a quarterly basis, permits rose in three of the four quarters of 2017, as compared to the same quarters of the prior year. While permits fell by 16.0% in the third quarter of 2017, they rose by 193.9% in the first quarter, 49.2% in the second quarter, and 13.0% in the fourth quarter.

Permits for new housing units rose not only because the number of buildings being newly constructed rose, but because the size of these buildings also rose. While the number of buildings receiving permits rose 7.8% between 2016 and 2017,

the average building size rose from 10.5 units in 2016, to 13.2 in 2017, a 26.2% increase. In the first quarter of 2017, a quarter in which the number of permits issued nearly tripled, average building size rose from 7.3 units to 15.8 units, a 116.2% increase. For historical permit information by quarter, see Appendix F.3.

The most recently available data, from the first quarter of 2018, showed that newly issued permits were down as compared to the same period of the prior year, with decreases in every borough but the Bronx. The number of permits issued in NYC decreased from 6,343 in the first quarter of 2017 to 5,170 during the first quarter of 2018, an 18.5% decrease. While permits rose 5.1% in the Bronx, they fell by 10.8% in Manhattan; 17.2% in Brooklyn; 34.7% in Staten Island; and 44.6% in Queens. In addition to a decrease of 9.2% in the number of buildings newly permitted during this quarter, the average size of the buildings newly permitted fell by 10.2%, decreasing from 15.8 units to 14.2 units. Average building size fell in every borough except Staten Island (where it rose just 0.1%), falling by the greatest proportion in Queens, where the





average building size fell from 15.4 units in the first quarter of 2017 to 7.5 units in the first quarter of 2018. For historical permit information by quarter, see Appendix F.3.

Permit data can also be analyzed more deeply by looking at the reported size of the buildings receiving permits. In 2017, a total of 1,673 buildings received permits (containing a total of 22,131 housing units). Citywide, 28.9% of these buildings were singlefamily, 31.7% were two-family, 9.9% were three- or four-family structures, and 29.5% were buildings with five-or-more units. In 2017, 90.7% of all permits issued Citywide were for units in five-family or greater buildings (a total of 20,062 units), with the average five-family or greater building containing 41 units for the City as a whole, and 75 units in Manhattan (both slight increases from the prior year). As the graph on this page illustrates, almost all building permits in Manhattan were for the largest buildings, while in Staten Island virtually all permits were for either one- or two-family buildings. Building size was more evenly distributed in the Bronx and Brooklyn (and to a lesser extent in Queens). (See Appendix F.2.)

Housing Completions

This report also examines the number of units completed in the City each year, indicative of what housing actually enters the market in a particular year. In 2017, an estimated 25,839 new housing units were completed, an 11.1% increase from 2016.⁶ Completions rose in three of the five boroughs, rising by the greatest proportion in Queens, which rose 46.4% (to 5,041 units). Completions also rose in Brooklyn, up 21.0% (to 11,065 units); and the Bronx, up 5.5% (to 2,672 units); However, completions declined in Staten Island, down 45.1% (to 671 units); and Manhattan, down 7.4% (to 6,390 units). Citywide, 93.3% of the newly completed units were in five-family or greater buildings, up from 91.1% in the prior year. The average size of completed buildings, by borough, ranged from 1.6 units per building in Staten Island; to 13.0 units in Queens; 20.3 units in Brooklyn; 24.7 units in the Bronx; and 75.2 units in Manhattan.

(See Appendix F.4 for a historical breakdown of completions by borough.⁷)

City-Sponsored Construction

Housing is created and preserved in part through publicly funded sources, including programs sponsored by the NYC Department of Housing Preservation and Development (HPD) and the NYC Housing Development Corporation (HDC). HPD's Office of Development operates a number of programs that develop affordable housing for low- and moderate-income New Yorkers. Programs include the Extremely Low and Low-Income Affordability Program, which is HPD's multi-family new construction housing initiative, financed through both public and private sources; the Affordable Neighborhood Cooperative Program, which provides very low interest loans for the rehabilitation of buildings into affordable cooperatives for low and moderate-income households; and the Multifamily Housing Rehabilitation Loan Program, which provides rehabilitation loans at a maximum 3% interest for the replacement of major building systems. HDC operates some of the same programs as HPD, in addition to programs such as the Mitchell-Lama Preservation Program, which offers loans to Mitchell-Lama owners in order to make needed capital improvements, and the Preservation Program, which provides tax-exempt bond financing to affordable housing developments with at least 50 units.

HPD- and HDC-sponsored programs spurred a total of 24,293 housing starts⁸ in Fiscal Year (FY) 2017, a 2.9% increase over the prior FY. Of these starts, 16,588 (68.3%) were preservation, and 7,705 (31.7%) were new construction. A total of 22,500 units are targeted for FY 2018 and 24,000 for FY 2019.⁹ During the first nine months of FY 2018 there were 11,441 starts by HPD and HDC, an increase of 11.5% over the same period of the prior FY.¹⁰

In May of 2014, Mayor Bill de Blasio announced details of his ten-year, \$41 billion plan to build and/or preserve 200,000 units of affordable housing. "Housing New York: A Five-Borough, Ten-Year Plan" projected that 60% of the units would be preservations, and 40% would be new construction. The majority, 58%, were slated for "low-income" residents (defined

at the plan's inception as \$42,000-\$67,000 for a family of four), with 22% geared for residents making more than this amount, and 20% for residents making less than this amount.¹¹

That plan has now been modified and expanded. In "Housing New York 2.0," released in November of 2017, the de Blasio administration outlined a plan to complete the promised 200,000 units of housing two years ahead of schedule, and add another 100,000 units to the goal, for a total of 300,000 affordable units by 2026. The new guidelines call for 55.5% to be affordable for "low-income" families making between 51% and 80% of Area Median Income (currently \$42,951-\$68,720 for a family of three), with 19.5% geared toward residents making more than this amount, and 25.0% for residents making less than this amount. The plan also creates new programs aimed at increasing affordable housing for seniors, preserving Mitchell-Lama housing, and creating more micro units. 12

Through March of 2018, the de Blasio administration reports they have financed 89,092 units of affordable housing since the start of the Mayor's tenure, 68% preservation and 32% new construction. By borough, 33.6% of the starts were located in the Bronx, with 28.8% in Manhattan, 25.6% in Brooklyn, 9.6% in Queens, and 2.3% in Staten Island. By affordability level, 15.4% of the starts were aimed at extremely low-income households, 18.3% at very low-income households, 48.1% at low-income households, 6.7% at moderate-income households, and 11.1% at middle-income households. Just over 13,000 of these units were dedicated to special needs populations (the homeless and seniors).

Tax Incentive Programs

The City offers various tax incentive programs to promote the development of new housing. Various iterations of the 421-a tax exemption program, which began in the early 1970s, have allowed both renterand owner-occupied multifamily properties to reduce their taxable assessed value for the duration of the benefit period. That is, owners were exempt from paying additional real estate taxes due to the increased value of the property resulting from the new construction. Rental apartments built with 421-a tax

exemptions are currently subject to the provisions of the Rent Stabilization Laws during the exemption period. Initial rents are required to be approved by HPD and are then subject to increases established by the NYC Rent Guidelines Board.

A variety of factors are used to establish the level and period of 421-a benefits, and properties are also subject to construction guidelines. After expiring at the end of 2015, the latest iteration of the 421-a was reinstated in April of 2017 (retroactive to January of 2016) with a new name (Affordable New York Housing Program) and policy changes. Prior to 2016, the program, which is still newly certifying units, allowed eligible buildings to receive an exemption for 10 to 25 years depending on location, the number of units reserved for low- and moderate-income tenants, and whether they were located in a City-designated neighborhood preservation area. Longer exemption periods applied in northern Manhattan and boroughs outside Manhattan, and to projects that received governmental assistance or contained no fewer than 20% low-income units. For buildings within the Geographic Exclusion area (all of Manhattan, and parts of each of the other boroughs), affordable housing must be contained within the newly constructed building.14



Per the new Affordable New York program (effective January 1, 2016), rental developments with 300 units or more in Manhattan (south of 96th Street) and the Brooklyn and Queens waterfront will be eligible for a full property tax abatement for 35 years if the development creates one of three options for affordable rental units and meets newly established minimum construction wage requirements. The units must remain affordable for 40 years. For all other rental developments in NYC utilizing the tax benefit, the full tax exemption benefit period is 25 years, with a phasing out of benefits in years 26-35. developers who use the benefit program to build co-op or condo housing, the building must contain no more than 35 units, be located outside of Manhattan, and have an assessed value of no more than \$65,000 per unit. The benefit lasts for a total of 20 years, with a full exemption for the first 14.15 The governor estimates that the new program, which expires in 2022, will create 2,500 new units of affordable housing a year. 16

In March of 2017, the NYC Independent Budget Office analyzed the then-proposed Affordable New York program and estimated that it would cost the City a total of \$8.4 billion in lost tax revenue over the next ten years, an estimated \$1.2 billion more than the cost if the now-expired 421-a program continued unchanged.¹⁷

In 2017, the number of housing units newly receiving a 421-a Final Certificate of Eligibility increased dramatically, following five consecutive years of decrease. Newly certified units rose 363.0% in 2017, to 20,804 units (see graph on this page), including increases in all of the boroughs. Newly certified units increased only slightly in Staten Island, rising from no units in 2016 to 32 in 2017. Units newly certified rose by the greatest proportion in Manhattan, an increase of 787.7% (an almost nine-fold increase). Units also rose dramatically in the Bronx, rising 637.8%; Queens, rising 364.0%; and Brooklyn, rising 206.7%.

Citywide, the largest proportion of units newly certified in 2017 were in buildings located in Brooklyn, with 39.4% of the total units in the City. Manhattan had 35.8% of these units, Queens had 17.2%, the Bronx had 7.4%, and 0.2% of units were in Staten Island. Because buildings in Manhattan are so much

larger than buildings in the outer boroughs, more than a third of units were in Manhattan, despite having only 67 of the 966 buildings (7%) newly certified for 421-a benefits Citywide. (See Appendices F.7 and F.8.)

While the overall (both owner- and renter-occupied) number of newly certified 421-a units rose 363.0% between 2016 and 2017, the number of rental units in this program rose by a greater amount, 461.7%. Most notably, newly certified rental units rose 2126.0% in Manhattan during 2017 (from 285 units to 6,344 units), with rental units rising 667.2% in the Bronx, 479.0% in Queens, and 215.8% in Brooklyn. There were no newly certified units in Staten Island during 2017. More than 84% of newly certified units in 2017 were rental units.

In Fiscal Year 2018, the 421-a program will cost the City \$1.4 billion in lost tax revenue for all housing types, including 105,000 rental units, 55,000 co-op and condo units, and 34,000 1-3 family and mixed-use structures.¹⁹

HPD announced in March of 2018 that they had suspended 421-a benefits, representing \$66 million in tax revenue for 2018, to 1,788 "properties." The "properties" (individual block and lots comprising approximately 1,300 buildings, including 109 rental buildings with 4,373 units) had received 421-a benefits for at least five years, but had not filed for a Final Certificate of Eligibility with the NYC Department of Finance (DOF). These owners, along with 3,480 others, received previous notice from DOF that they needed to comply within 13 months or their benefits would be suspended. The City will reinstate their benefits if they come into compliance by May 1, 2018.²⁰

Another program that has offered affordable housing, the New York State Mitchell-Lama program, has suffered from a loss of housing since "buyouts" from the program began in 1985.²¹ Between 1955 and 1978, approximately 140,000 units of low- and middle-income housing were built in NYC through this tax-break and mortgage subsidy program. Since buyouts began in 1985, the City has lost approximately 47,000 units of Mitchell-Lama housing (including 4,000 units of hospital/university staff housing), although some has transitioned to rent stabilization. After averaging an annual loss of more than 5,000 units between 2004 and 2007, the pace has slowed

considerably. Two developments bought out in 2017, with a total of 233 units. Both of these developments were rentals, and converted to rent stabilization.²² The de Blasio Administration announced in October of 2017 that it would implement a new program aimed at preserving the affordability of units in the Mitchell-Lama program (both rentals and co-ops, but only for those units supervised by the City). An investment of \$250 million will target 15,000 units of housing that have the potential to buyout of the program, by offering them an array of financing tools to restructure existing debt, provide long-term tax benefits, and fund capital repairs. The Administration reports that since the inception of the Housing New York Plan in 2014, 30 Mitchell-Lama developments with 11,000 units of housing have been preserved through similar initiatives.23

Conversions and Subdivisions

New housing units are also brought onto the market through subdivisions and conversions. Subdivisions involve the division of existing residential space into an increased number of units. Non-residential spaces, such as offices or other commercial spaces, can also be converted for residential use. As chronicled in prior *Housing Supply Reports*, during the mid-2000s, with a tight housing market and high demand for luxury apartments, there were an increasing number of conversions in neighborhoods Citywide. Conversions occurred in facilities as diverse as hospitals, recording studios, power plants, office buildings, and churches.

One indicator of conversions is the number of non-residential buildings newly receiving J-51 benefits for conversion to residential use. In 2017, for the second consecutive year, no formerly non-residential buildings received J-51 benefits for conversion to a co-op or condo.²⁴

SRO Housing and Airbnb Rentals

Conversion of single room occupancy (SRO) buildings also continued over the past year. SRO owners may convert SRO housing to other uses after obtaining a "Certificate of No Harassment" from HPD. Following a small decrease of 1.8% in 2016, the number of

approved certificates fell again in 2017, from 162 in 2016 to 92 in 2017, a decrease of 43.2%.²⁵

Efforts are also underway to ensure that SROs are used for permanent housing rather than as transient hotels. As of May 1, 2011, laws were newly passed strengthening the City's ability to crack down on housing being used illegally for transient occupancy. Transient occupancy is now clearly defined as stays of fewer than 30 days²⁶. Governor Cuomo signed a bill in October of 2016 that further increased the fine for illegally advertising short-term rentals to as much as \$7,500.²⁷

Between May of 2011 and April of 2018, 13,087 violations were issued to illegal hotel operators (including private apartments, hostels, and SROs). This includes 3,550 violations issued between May, 2017 and April, 2018), an increase of 99.2% over the same time period of the prior year.²⁸

The effect of Airbnb, a company which facilitates short-term and vacation rentals worldwide, continues to be studied by various City agencies and interest groups. A study published in January of 2018 analyzed Airbnb activity in the New York City metro region for the time period of September 2014 through August 2017. Among that report's key findings, the researchers found that just over half of all listings (accounting for two-thirds of all revenue) were likely from illegal

listings. The report also found that between 7,000 and 13,500 units of housing have been removed from the New York City permanent rental market and by reducing the housing supply, the median rent in New York City increased by 1.4% more over three years than it would have absent the effect of Airbnb.²⁹

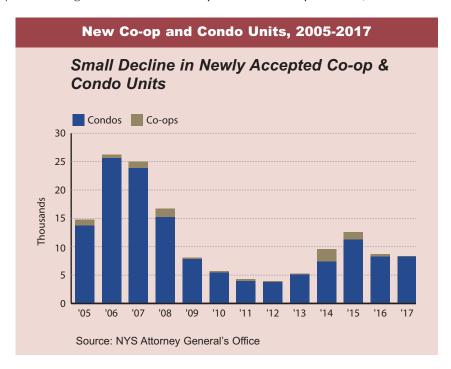
An April 2018 report from the NYC Comptroller's Office analyzed rent data from the Census Bureau's annual American Community Survey from 2009 through 2016 and used a regression analysis to estimate the effect that Airbnb had on rents. While there were Airbnb listings in every neighborhood of NYC, half the listings in 2016 were concentrated in just

seven neighborhoods of Manhattan and Brooklyn. In these seven neighborhoods, the average monthly rent rose from between 21.4% and 62.6% between 2009 and 2016, and anywhere from 10.7% to 21.6% of this increase was attributed to the effect of Airbnb removing units from the permanent rental housing stock. On the whole, the report found that for each one percent of housing units listed on Airbnb, rents in the neighborhood rose 1.58%. The report attributes 9.2% of the citywide increase in rental costs between 2009 and 2016 to Airbnb, or an additional \$616 million in rent.³⁰

Cooperative and Condominium Activity

Developers planning to build new co-op or condo buildings, and owners wishing to convert their rental buildings to co-ops or condos, must file plans with, and receive acceptance from, the New York State Attorney General's Office. In 2017, the Attorney General accepted 279 co-op and condo plans, a 1.1% decrease from the number accepted in 2016.³¹ These 279 plans encompassed 8,358 housing units, 3.6% fewer than in 2016 (see graph on this page).

Almost two-thirds of all plans, 180, were accepted for buildings located in Brooklyn; 59 were located in Manhattan; 35 plans were accepted for Queens; three



plans were accepted in the Bronx; and two plans were in Staten Island. Because Manhattan buildings tend to be larger than those in the outer boroughs, more units were located in Manhattan (3,555), with Brooklyn (2,576) and Queens (2,154) trailing, and only 67 units in the Bronx and six in Staten Island. (See Appendices F.5 and F.6.)

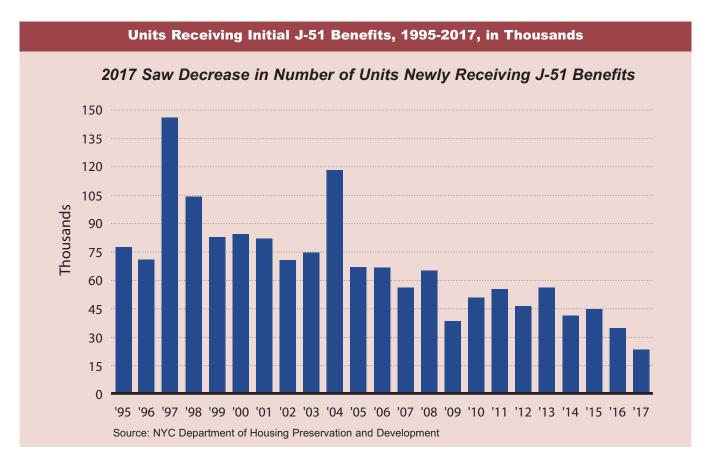
The majority of the plans accepted Citywide in 2017 were for new construction, comprising 228 of 279 plans, and a total of 6,906 of 8,358 units. This is similar to the prior year, when new construction accounted for 210 of the 282 accepted plans. A number of units were located in non-eviction conversions (with 18 plans and 764 units), and 33 plans, with 688 units, were rehabilitations. Of all the newly accepted plans in 2017, 98.4% of the units were in condo plans, and 1.6% were in co-op plans (see graph on the previous page).

While the conversion of rental housing into co-op and condo units increases the housing inventory for sale, it simultaneously reduces the total number of housing units for rent. Conversions represented 9.1%

of the total number of units in 2017 co-op and condo plans, a lesser share than the 18.5% share in 2016, and the smallest proportion since 1998. Because most conversion plans are non-eviction plans (including all plans in 2017), only when the original rental tenant moves out, or opts to buy the apartment, does the apartment become owner-occupied and removed from the rental universe.

Rehabilitation

Another method for adding to or preserving the City's residential housing stock is through rehabilitation of old buildings. As buildings age, they must undergo renovation and rehabilitation to remain habitable. This is particularly relevant to NYC's housing stock, where more than 57% of units are in buildings constructed prior to 1947.³² Through tax abatement and exemption subsidy programs offered by the City for rehabilitation, units are able to remain in, or be readmitted to, the City's housing stock. The J-51 tax abatement and exemption program is intended to encourage the



periodic renovation of NYC's stock of both renter- and owner-occupied housing.

The J-51 tax relief program is similar to the 421-a program in that it requires that those rental units not already rent stabilized be subject to rent regulation for the duration of the benefits. Rehabilitation activities that are permitted under J-51 regulations are Major Capital Improvements (MCIs); moderate and gut rehabilitation of both government-assisted and privately-financed multiple dwellings (which requires significant improvement to at least one major buildingwide system); as well as improvements to co-ops and condos (subject to certain assessment guidelines if the project does not include substantial governmental assistance). While prior incarnations of the J-51 program allowed for conversion of lofts and nonresidential buildings into multiple dwellings, regulations effective January 1, 2012 allow only for conversions if there is substantial governmental assistance.33

In 2017, 22,877 units newly received J-51 benefits, a decrease of 33.3% from the previous year (see graph on the previous page and Appendix F.8).³⁴ These units were contained in 1,413 buildings, a decrease of 35.5% from 2016 levels. The location of the units newly receiving benefits ranged from 34.9% located in Queens; to 28.5% in the Bronx; 20.2% in Brooklyn; 16.2% in Manhattan; and 0.2% in Staten Island. Units newly receiving benefits fell by double digits in three of the five boroughs, including decreases of 30.7% in Queens, 39.9% in Brooklyn, and 51.0% in the Bronx. Units newly receiving J-51 benefits rose 108.3% in Manhattan and from two to 38 units in Staten Island. (See Appendices F.7 and F.8.) The average size of the buildings receiving benefits rose slightly, from 15.7 units in 2016 to 16.2 units in 2017.

In Fiscal Year 2018, the J-51 tax program will cost the City \$294.5 million in lost tax revenue for all housing types, including approximately 267,000 rental units and 221,000 owner units.³⁵

Rehabilitation work is also carried out through HPD's "Alternative Enforcement Program (AEP)," now in its eleventh year of identifying the 200-250 "worst" buildings in the City, based on housing code violations. The most recent group of 250 buildings include 3,970 units of housing, with 7,602 non-hazardous A-class

violations, 21,442 hazardous B-class violations, and 4,859 immediately hazardous C-class violations. If building owners in this program do not make repairs to their buildings, the City steps in to do so, and then charges the owners. Through the first nine rounds of the program, the City discharged 1,647 buildings that entered the program, with a combined total of 22,033 units of housing.³⁶ In the 2017 round of the program, buildings were discharged at a record pace, with 138 of 250 buildings discharged in the first four months of that year's program.³⁷

Tax-Delinquent Property

In Rem Housing and Anti-Abandonment Strategies

Historically, the City foreclosed on thousands of taxdelinquent residential properties, becoming the owner and manager of these buildings, known as *in rem* properties. By its peak in 1986, the City owned and managed 4,000 occupied buildings containing 40,000 units of housing and almost 6,000 vacant buildings containing 55,000 units of housing.

HPD's Alternative Management Programs began in 1994 with the goal of returning City-owned properties to private owners and reducing its share of *in rem* buildings by identifying buildings at risk and helping owners. HPD has successfully reduced the number of occupied and vacant *in rem* units in HPD central management to 323 through March of 2018, an increase from last year, but a 99.3% decline since FY 1994.³⁸ Key initiatives to prevent abandonment include tax lien sales; the Third Party Transfer Program, which targets distressed and other buildings with tax arrears;³⁹ and housing education courses, which teach owners and superintendents basic management, maintenance, and finance skills to improve their properties.⁴⁰

The City no longer forecloses and takes title to properties that are tax delinquent or in arrears for water and sewer charges. Instead, tax liens for properties that are not distressed are sold in bulk to private investors after notice is given to property owners, who are given 90 days to pay the arrears. After the lien is sold, the lien holder is entitled to collect the entire lien amount, plus other interest and charges, from the property

owner. In addition, the property owner must continue to pay current taxes to the City. If the owner has not paid the lien or entered into a payment plan, the lien holder can file for foreclosure on the property.⁴¹ The Lien Sale Task Force, a task force authorized by law to review and evaluate the Lien Sale Program, reported in September of 2016 that between 2008 and 2016, an average of 25,100 properties were added to the lien sale list annually. But the number of liens actually sold was an average of 4,600, or 18.3% of the liens published in the 90-day notice. Of the 41,400 liens sold during this period, just 354 (0.8%) ultimately went into foreclosure, with less than half of these foreclosed properties being residential.⁴²

An additional facet of the City's anti-abandonment strategy is third party transfer. For buildings that are distressed and in tax arrears, the City can initiate an in rem tax foreclosure action against property owners. The policy, authorized under Local Law 37 of 1996, transfers the title of in rem properties directly to new owners (qualified third parties) without the City ever taking title itself.⁴³ Since it began in 1996, the NYC Department of Finance has collected at least \$536 million in revenue associated with properties in this program, and 530 buildings have been transferred to for-profit and non-profit owners. No new properties have been transferred since 2013, although Round 10 of this program has identified 139 buildings (comprising 2,132 units) which will be transferred in the near future.44

Demolitions

While in the early 1990s relatively few residential buildings in NYC were demolished, this began to change in 1996, the same year that the number of building permits issued began to increase significantly. In fact, the number of buildings demolished between 2005 and 2007 alone was almost triple the number demolished in all the years from 1990 to 1999 combined. However, for the second consecutive year, demolitions decreased Citywide in 2017. A total of 1,722 buildings were demolished in 2017, a 6.9% decrease over the prior year, following a decrease of 2.0% in 2016. Queens accounted for 33.6% of all the buildings demolished in 2017, Brooklyn had 33.3%,

Staten Island had 18.6%, the Bronx had 7.9%, and Manhattan had the lowest proportion, 6.6%. Demolitions fell in every borough but Staten Island, where they rose by 36.2%. Demolitions fell by the greatest proportion in Manhattan, falling 36.0%, while they fell 11.6% in Queens, 10.7% in Brooklyn, and 2.2% in the Bronx.⁴⁵ (See Appendix F.9.)

Obtaining a permit for demolition or significant alterations may be harder going forward. A three-year pilot program, in effect starting in the Fall of 2018, will require certain owners to obtain a "Certificate of No Harassment" (CONH) before Department of Buildings approval of demolition or significant alteration permits. Among the buildings that will need this approval are those in which either a court or New York State Homes and Community Renewal found at least one case of harassment since September of 2013; distressed buildings in one of 11 Community Districts; buildings that have been the subject of a full vacate order; or those buildings that participated in the AEP program for at least four months since February 1, 2016. Following a hearing to determine whether harassment of tenants has taken place within the previous 60 months, those buildings found not eligible for a CONH have the choice of entering into a "cure agreement," where affordable housing is developed within the Community District in exchange for the permit. Absent a cure agreement, no permits will be issued to those buildings who fail to obtain a CONH for at least 60 months following the denial.46

Summary

In 2017, housing permits rose, rising by 36.0%, while the number of completed housing units increased by 11.1%. The number of units newly receiving 421-a tax benefits rose 363.0% in 2017, while units newly receiving J-51 tax abatements and exemptions decreased by 33.3%. There was a decrease in newly accepted co-op and condo units, with units decreasing 3.6% and plans decreasing by 1.1%. Rental housing availability remains tight, with a Citywide vacancy rate of 3.63% in 2017, and more than 11% of rental units overcrowded. Mayor de Blasio's expanded housing initiative calls for the development and preservation of 300,000 units of housing by 2026, more than 89,000

Endnotes

- The NYC Housing and Vacancy Survey is conducted triennially, sponsored by the NYC Department of Housing Preservation and Development (HPD) and conducted by the U.S. Census Bureau. Data is based on "Selected Initial Findings of the 2017 NYC Housing and Vacancy Survey," prepared by HPD.
- The U.S. housing stock was comprised of 36.9% renter-occupied units, according to the 2016 American Community Survey, conducted by the U.S. Census Bureau. To calculate the ratio of renter-occupied units in NYC, staff did not include vacant units that are not for sale or for rent in the total number of housing units.
- Other units include public housing, Mitchell-Lama, In Rem, HUDregulated, Article 4 and Loft Board units.
- 4. Since the number of vacant units available for rent in Staten Island is small, and the HVS is a sample survey, the sampling error of the vacancy rate is likely to be large, and thus, the U.S. Census Bureau could not calculate an accurate vacancy rate.
- U.S. Census Bureau web site. https://www.census.gov/construction/bps/
- NYC Department of City Planning Housing Database 18v1, compilation of NYC DOB Applications and Certificates of Occupancy data. Note that the data is continually updated and is subject to change, including data from prior years.
- 7. Beginning with the 2006 Housing Supply Report, the NYC Department of City Planning (DCP) defines a housing completion as any unit receiving either a final or a temporary Certificate of Occupancy in the stated year. DCP provided this information for the 2004 calendar year and beyond, and believes it is a more accurate representation of new housing in NYC than previous methodologies which only counted final Certificates of Occupancy.
- 8. Starts refer to the number of units beginning construction or rehabilitation in a given period.
- Preliminary Fiscal 2018 Mayor's Management Report . http://www1.nyc.gov/site/operations/performance/mmr.page
- Housing New York By the Numbers website: http://www1.nyc.gov/site/housing/action/by-the-numbers.page; Accessed April 2018, with data through 3/31/2018.
- "Housing New York: A Five-Borough, Ten-Year Plan," NYC Department of Housing Preservation and Development. May 5, 2014
- "Housing New York 2.0" NYC Department of Housing Preservation and Development. November 15, 2017
- 13. Housing New York By the Numbers website: http://www1.nyc.gov/site/housing/action/by-the-numbers.page; Accessed April 2018, with data through 3/31/2018. Extremely Low-Income is defined as 0-30% of Area Median Income (AMI); Very Low-Income: 31-50% of AMI; Low-Income: 51-80% of AMI; Moderate-Income: 81-120% of AMI: Middle-Income: 121-165% of AMI.

- Program information available at: http://www1.nyc.gov/site/hpd/developers/tax-incentives-421a.page
- "Affordable Housing Program Revived," Greenberg Traurig, April 13, 2017. <a href="http://www.gtlaw.com/News-Events/Publications/Alerts/203029/Affordable-New-York-Housing-Publications/Alerts/203029/Affordable-New-York-Housing-New-York-Housing-New-York-Housing-New-York-Housing-New-York-Housing-New-York-Housing-New-York-Housing-New-York-Housing-New-York-Housing-New-York-New-Yor
- "Governor Cuomo and Legislative Leaders Announce Agreement on FY 2018 State Budget," State of New York Press Release, April 7, 2017.
- "Estimated Cost to New York City of Governor Cuomo's Proposed Affordable New York Housing Program," NYC Independent Budget Office, March, 2017.
- 18. NYC Department of Housing Preservation and Development, Tax Incentives Program data. It is possible that part of the large increase in newly issue Final Certificates of Eligibility (FCE) is due to enforcement policies by HPD, requiring owners to file for FCEs or lose their tax benefits. This is explained in more detail at the end of this section.
- "Annual Report on Tax Expenditures," NYC Department of Finance publication, February, 2018.
- 20. "City Suspends 421-a Benefits to More Than 1,700 Non-Compliant Owners." HPD Press Release. March 9, 2018. Note that the 1,788 properties include condo buildings, with each unit within the building having an individual block and lot designation.
- 21. Developments are eligible to withdraw from the Mitchell-Lama program, or buyout, after 20 years upon prepayment of the mortgage (or after 35 years in the case of developments aided by loans prior to May 1, 1959).
- 22. The number of Mitchell-Lama buyouts was provided most recently through the NYC Department of Housing Preservation and Development and the NYS Homes and Community Renewal, and in previous years through other sources, such as the report "Affordable No More: An Update" by the Office of the New York City Comptroller, Office of Policy Management on May 25, 2006.
- "Mayor de Blasio Announces New Program to Save City's Remaining Affordable Mitchell-Lama Developments." HPD Press Release. October 26, 2017.
- 24. NYC Department of Housing Preservation and Development, Tax Incentives Program data.
- 25. NYC Department of Housing Preservation and Development.
- Mayor Bloomberg Announces Results of City's Efforts to Curb Dangerous Illegal Hotels in New York City After State Legislation Enhances Enforcement Abilities." Mayor's Office Press Release 157-12. April 27, 2012.
- "Cuomo signs bill that deals huge blow to Airbnb," New York Post, October 21, 2016.
- 28. Office of the Criminal Justice Coordinator, Mayor's Office of Special Enforcement. Inclusive of data through April 30, 2018.
- "The High Cost of Short-Term Rentals in New York City." McGill University, January 30, 2018.
- The Impact of Airbnb on NYC Rents. NYC Comptroller's Office, April 2018.
- 31. NYS Attorney General's Office, Real Estate Financing Bureau data and the NYC Department of Housing Preservation and Development, Sales Unit. Virtually all accepted units reported are from data provided by the NYS Attorney General. For the purposes

- of this report, "accepted" refers only to those co-op and condo plans that require offering plans. Those that do not, and receive a "no-action" letter from the NYS Attorney General's office, are not included in this data.
- 32. 2017 NYC Housing and Vacancy Survey, U.S. Census Bureau.
- Landlord Information/Tax Incentives: J-51, NYC Department of Housing Preservation and Development web site.
 http://www1.nyc.gov/site/hpd/developers/tax-incentives-j51.page
- 34. NYC Department of Housing Preservation and Development, Tax Incentives Program data. Note that, similar to the 421–a program, J-51 provides tax abatements and incentives to both renter- and owner-occupied units.
- 35. "Annual Report on Tax Expenditures," NYC Department of Finance publication, February, 2018.
- "Mayor de Blasio Announces Comprehensive Enforcement Action Against 250 NYC Apartment Buildings." HPD Press Release. February 12, 2018.
- "Enforcement Update: More than Half of Buildings on the 2017 AEP List Have Been Discharged From the Program." HPD Press Release. August 10, 2017.
- 38. NYC Department of Housing Preservation and Development.
- NYC Department of Housing Preservation and Development website. http://www1.nyc.gov/site/hpd/owners/compliance-property-tax-delinquency.page
- 40. NYC Department of Housing Preservation and Development website. http://www1.nyc.gov/site/hpd/community/outreach-and-education.page
- 41. NYC Department of Finance, General Information on the City's Tax Lien Sale Process. http://www1.nyc.gov/site/finance/taxes/ property-lien-sales.page>
- 42. "Report of the Lien Sale Task Force," September 2016.
- 43. "New York City Case Study: Third Party Transfer Initiative: A Solution To Property Abandonment," by Lisa Mueller, Local Initiative Support Corporation report, January 14, 2003.
- 44. Most recent figures obtained from NYC Department of Housing Preservation and Development, April, 2018.
- 45. NYC Department of Buildings (DOB) data. Note that demolition statistics include both residential as well as commercial buildings, as the DOB does not specify the type of building in its data.
- 46. City of New York Local Law 1 of 2018.

Changes to the Rent Stabilized Housing Stock in New York City in 2017

What's New

- The study finds a net estimated gain of 4,387 rent stabilized units in 2017.
- Most of the additions to the rent stabilized stock in 2017 were due to the 421-a tax incentive program, accounting for 85% of the additions.
- ◆ The median rent of initially registered rent stabilized apartments in 2017 was \$2,685, a 2% decline from the prior year.
- High-Rent Vacancy Deregulation made up the largest category of subtractions from the stabilized stock, accounting for 53% of the units removed in 2017.
- Since 1994, New York City's rent stabilized housing stock has seen an approximate net loss of 147,512 units.

Overview

Rent regulation has been a fixture in New York City's housing market for over seven decades, although the laws that govern rent regulated housing have been substantially changed and/or modified over time. The laws governing rent regulation allow for dynamic changes in the regulatory status of a significant portion of the rent regulated housing stock in any given year. Units enter, exit or change status within the regulatory system.

The figures in this study represent additions and subtractions of dwelling units to and from the rent stabilization system in 2017. These statistics are gathered from various City and State agencies.

This report is an update of previous studies done annually since 2003, when an analysis was done of the changes in New York City's rent stabilized housing stock from 1994 to 2002. The total number of additions and subtractions to the rent stabilized housing stock since 1994 is contained in the appendices of this report. These totals are estimates because they do not represent every unit that has been added or subtracted from the rent stabilized stock since 1994, but rather those that have been recorded or registered by various City and State agencies. They represent a 'floor,' or minimum count, of the actual number of newly regulated and deregulated units in these years.

Additions to the Rent Stabilized Housing Stock

Since newly constructed or substantially rehabilitated units are exempt from rent regulation, increases to the regulated housing stock are frequently a result of owners placing these new units under rent stabilization in exchange for tax benefits. These owners choose to place units under rent stabilization because of cost/benefit analyses concluding that short-term regulation with tax benefits is more profitable than free market rents without tax benefits. According to NYS Homes and Community Renewal (HCR), the median legal rent of initially registered rent stabilized apartments in 2017 Citywide was \$2,685, a decline of 2% from \$2,750 in 2016. (See Appendix G.3 for initially registered rents Citywide and by borough.) Events that lead to the addition of stabilized units include:

- Section 421-a Tax Exemption Program
- J-51 Property Tax Exemption and Abatement Program
- Mitchell-Lama buyouts
- Lofts converted to rent stabilized units
- Rent controlled apartments converting to rent stabilization
- Other Additions

Section 421-a and J-51 Programs

The NYC Department of Housing Preservation and Development (HPD) administers programs to increase the supply of rental housing. Two of these programs have an impact on the inventory of stabilized housing: The Section 421-a Program and the J-51 Program. Under Section 421-a of the Real Property Tax Law, newly constructed dwellings in New York City could elect to receive real estate tax exemptions in exchange for placing units in rent stabilization for a specified period (10-25 years). In 2017, an estimated total of 9,376 units were added to the rent stabilized stock through the 421-a program, 91% more than the 4,921 units added in 2016.1 The largest number of units was in Brooklyn (5,309); followed by Manhattan (1,996); Queens (1,561); the Bronx (504); and Staten Island (6). According to HCR, the median legal rent of currently registered rent stabilized apartments receiving 421-a tax abatements in 2017 was \$3,300, a 1% increase from \$3,270 in 2016.

The J-51 Program provides real estate tax exemptions and abatements to existing residential buildings that are renovated or rehabilitated. This program also provides these benefits to residential buildings converted from commercial structures. In exchange for these benefits, owners of these buildings agree to place under rent stabilization those apartments that otherwise would not be subject to regulation. The apartments remain stabilized, at a minimum, until the benefits expire. In 2017, no units were converted from non-residential to residential under the J-51 program, the same as in 2016 and 2015. (See Appendices G.1 and G.2.)

Mitchell-Lama Buyouts

Mitchell-Lama developments were constructed under the provisions of Article 2 of the Private Housing Finance Law (PHFL). This program was primarily designed to increase the supply of housing affordable to middle-income households. Approximately 75,000 rental apartments and 50,000 cooperative units were constructed under the program from the 1950's through the 1970's. For these units to be affordable, the State or City provided low interest mortgages and real estate tax abatements, and the owners agreed to limit their return on equity.

While the State and City mortgages are generally for a term of 40 or 50 years, the PHFL allows owners to buy out of the program after 20 years. If an owner of a rental development buys out of the program and the development was occupied prior to January 1, 1974, the apartments become subject to rent stabilization.

In 2017, 233 Mitchell-Lama rental units became rent stabilized, compared to 716 in 2016. Since 1994, 11,393 rental units have left the Mitchell-Lama system and become a part of the rent stabilized housing stock. (See Appendices G.1 and G.2.)

Loft Units

The New York City Loft Board, under Article 7-C of the Multiple Dwelling Law, regulates rents in buildings originally intended as commercial loft space that have been converted to residential housing. When the units are brought up to code standard, they become stabilized. A total of 10 units entered the rent stabilization system in 2017, compared to five added in 2016. (See Appendices G.1 and G.2.)

Changes in Regulatory Status

Chapter 371 of the Laws of 1971 provided for the decontrol of rent controlled units that were voluntarily vacated on or after July 1, 1971. Since the enactment of Vacancy Decontrol, the number of rent controlled units has fallen from over one million to fewer than 22,000.2 When a rent controlled unit is vacated, it either becomes rent stabilized or leaves the regulatory system. A rent controlled unit becomes rent stabilized when it is contained in a rental building with six or more units and the incoming tenant pays a legal regulated rent less than the Deregulation Rent Threshold (DRT), currently \$2,733.75 per month.3 This process results in a reduction of the rent controlled stock and an increase in the rent stabilized stock. Otherwise, the apartment is subject to deregulation and leaves the rent regulatory system entirely.

According to rent registration filings with NYS Homes and Community Renewal (HCR), 142 units

were decontrolled and became rent stabilized in 2017, down 62% from the prior year. By borough, 44% of the units were in Manhattan; 21% were in Queens and another 21% were in Brooklyn; 14% were in the Bronx; and there were none on Staten Island. (See Appendices G.1 and G.2.)

Other Additions to the Stabilized Housing Stock

Additionally, several other events can increase the rent stabilized housing stock: tax incentive programs (other than the 421-a and J-51 programs), "deconversion," returned losses, and the sub-division of large units into two or more smaller units. The 420-c program, a tax exemption program for low-income housing projects developed in conjunction with the Low-Income Housing Tax Credit Program, produces affordable housing with rents that are regulated, but not necessarily rent stabilized.⁴ The RGB is unable to determine the number of these units that became rent stabilized.

However, there are other tax incentive programs, which as part of their regulatory agreements may require their rental units to be rent stabilized, and whose stabilization status could be determined. These tax incentive programs include Articles 11, 14 and 15 of the Private Housing Finance Law (PHFL), which together added 1,283 units Citywide. Among these tax incentive programs, the majority of units were in Brooklyn (824 units); followed by Staten Island (276 units); and Manhattan (183 units). There were no units added in Queens or the Bronx.

Deconversion occurs when a building converted to cooperative status reverts to rental status because of financial difficulties. Returned losses include abandoned buildings that are returned to habitable status without being substantially rehabilitated, or Cityowned *in rem* buildings being returned to private ownership. These latter events, as well as sub-division of large units, do not generally add a significant number of units to the rent stabilized stock and cannot be quantified for this study.

Subtractions from the Rent Regulated Housing Stock

Deregulation of rent controlled and stabilized units occurs because of statutory requirements or because of physical changes to the residential dwellings. Events that lead to the removal of stabilized units include the following:

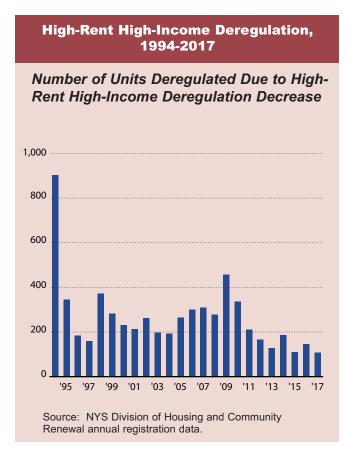
- High-Rent High-Income Deregulation
- High-Rent Vacancy Deregulation
- Cooperative/Condominium Conversions
- Expiration of 421-a Benefits
- Expiration of J-51 Benefits
- Substantial Rehabilitation
- Conversion to Commercial or Professional Status
- Other Losses to the Housing Stock Demolitions, Condemnations, Mergers, etc.

High-Rent High-Income Deregulation

Since enactment of the Rent Regulation Reform Act (RRRA) of 1993, occupied apartments may be deregulated under certain circumstances. Beginning with the RRRA of 1993, apartments renting for \$2,000 or more in which the tenants in occupancy had a combined household income more than \$250,000 in each of the immediately two preceding calendar years could be deregulated. In 1997, the RRRA reduced the income threshold to \$175,000. Fourteen years later, with passage of the Rent Act of 2011, the rent threshold was raised to \$2,500 and the income requirement increased to \$200,000.

Most recently, the Rent Act of 2015, effective June 15, 2015, maintained the same income requirement but modified the Deregulation Rent Threshold (DRT) for High-Rent High-Income Deregulation. The DRT was increased to \$2,700 and is adjusted each January 1st thereafter by the one-year renewal lease guideline percentage issued the prior year by the Rent Guidelines Board. Most recently, the DRT rose to \$2,733.75, effective January 1, 2018.

Deregulation occurs upon application by the owner and upon the expiration of the rent stabilized lease. This income-based deregulation process, which is administered by HCR, relies upon data furnished to



the NYS Department of Taxation and Finance as part of the income verification process. Both the rent level and household income criteria should be met for deregulation to take place. For example, currently, if a household earning at least \$200,000 paid less than \$2,733.75 per month, rent regulation would remain in effect. In addition, the owner must apply to HCR to deregulate the unit. If the owner does not submit a deregulation application, the occupying tenant remains regulated regardless of rent level and household income. Because HCR must approve the orders of deregulation, an exact accounting exists of units leaving regulation because of High-Rent High-Income Deregulation.

Based on HCR processing records, High-Rent High-Income Deregulation removed a total of 107 apartments from rent regulation in 2017, a 27% decline from the prior year.⁶ Of these units, 46% were in Manhattan; 30% in Brooklyn; 19% in Queens; and 6% were in the Bronx. No units were located on Staten Island. Over the last decade, the number of units deregulated under this provision has declined from the prior year in seven of the last ten years.

Since 1994, a total of 6,346 units have been deregulated due to High-Rent High-Income Deregulation, of which 86% have been in Manhattan. (See graph on this page and Appendix G.4.)

High-Rent Vacancy Deregulation

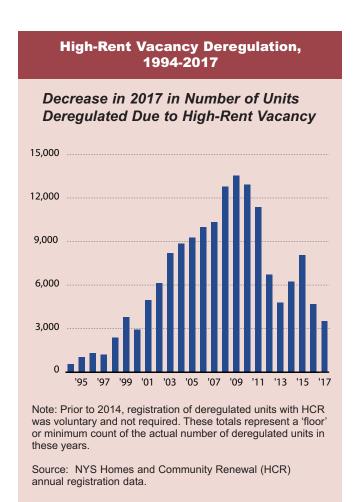
In 1993, the New York State legislature instituted High-Rent Vacancy Deregulation, provisions of which have changed several times since its inception.⁷ (See the *Changes to the Rent Stabilized Housing Stock in NYC in 2014* report for a detailed discussion of the numerous changes over the years.)

Under the Rent Act of 2015, when a tenant moves into a vacant apartment and the rent has lawfully reached the Deregulation Rent Threshold (DRT), the apartment qualifies for permanent High-Rent Vacancy Deregulation. The DRT is adjusted each January 1st by the one-year renewal lease guideline percentage issued the prior year by the NYC Rent Guidelines Board. Most recently, the DRT rose to \$2,733.75, effective January 1, 2018.

Furthermore, HCR's Rent Code Amendments of 2014 require an owner to serve the first deregulated tenant with two documents. The first is a notice created by HCR detailing the previous rent and how the new rent was calculated. The second is HCR annual apartment registration, indicating the apartment status as permanently exempt, which should be filed on the April 1st following the deregulation. These documents notify the tenant of the right to file a formal complaint with HCR challenging the rent and the deregulation status.

According to HCR rent registration records, 3,517 units were deregulated in 2017 due to High-Rent Vacancy Deregulation, a decline of 25% from the number deregulated in 2016. Of these deregulated units, 49% were in Manhattan; 25% were in Brooklyn; 20% were in Queens; 5% were in the Bronx; and 1% were on Staten Island. Since 1994, at least 155,664 units were registered with the HCR as being deregulated due to High-Rent Vacancy Deregulation, 70% of which have been in Manhattan.⁸

Since 2001, the rate at which registrations have changed over the prior year has varied. From 2001 to 2002, High-Rent Vacancy Deregulation registrations



increased by 23%, and from 2002 to 2003, they increased by 34%. From 2004 to 2009, the rate of increase was between 4% and 8% each year, except for 2008, when the number of units registering as deregulated due to High-Rent Vacancy Deregulation increased 24% over the prior year. Since 2010, the number of units subject to High-Rent Vacancy Deregulation declined in all but two years. (See graph on this page and Appendices G.5 through G.7.)

Co-operative & Condominium Conversions

When rent regulated housing is converted through cooperative or condominium conversion to ownership status, apartments are immediately removed from rent regulation if the occupant chooses to purchase the unit.

For tenants who remain in their apartment and do not purchase their unit, the rent regulatory status depends on the type of conversion plan. In eviction conversion plans, non-purchasing tenants may continue in residence until the expiration of their lease. In non-eviction plans (which are the overwhelming majority of approved plans) the regulated tenants have the right to remain in occupancy until they voluntarily leave their apartments. When a tenant leaves a regulated unit, the apartment in most cases becomes deregulated, whether the incoming tenant purchases or rents.

In 2017, a total of 672 units located in co-ops or condos left the stabilized housing stock, a 1% increase over the number of units that left the system the prior year. By borough, the largest proportion of units leaving rent stabilization and becoming co-op/condo was in Manhattan, with 38% of the units; followed by Queens (34%); Brooklyn (18%); and the Bronx (11%). No units on Staten Island left rent stabilization due to co-op/condo conversion. An estimated total of 49,640 co-op or condo units have left the stabilized stock since 1994. (See Appendices G.6 and G.7.)

Expiration of Section 421-a and J-51 Benefits

As discussed earlier in this report, rental buildings receiving Section 421-a and J-51 benefits remain stabilized, at least until the benefits expire. Therefore, these units enter the stabilized system for a prescribed period of the benefits and then exit the system.

In 2017, expiration of 421-a benefits resulted in the removal of 1,363 units from the rent stabilization system, 82% more than the number removed the prior year. Most 421-a expirations were in Manhattan (75%), while the remainder were in Brooklyn (14%); Queens (8%); the Bronx (2%); and Staten Island (2%). (See Endnote 9)

The expiration of J-51 benefits in 2017 resulted in the removal of 363 units, 21% fewer than the number in 2016. Among J-51 expirations, the vast majority were in Manhattan, with 89%; followed by Brooklyn (9%); Queens (2%); and the Bronx (less than 1%). No units were removed on Staten Island.

Since 1994 Citywide, 25,125 421-a units and 16,216 J-51 units have left the rent stabilization system. (See Appendices G.6 and G.7.)

Substantial Rehabilitation

The Emergency Tenant Protection Act (ETPA) of 1974 exempts apartments from rent regulation in buildings that have been substantially rehabilitated on or after January 1, 1974. HCR processes applications by owners seeking exemption from rent regulation based on the substantial rehabilitation of their properties. Owners must replace at least 75% of building-wide and apartment systems (i.e., plumbing, heating, electrical wiring, windows, floors, kitchens, bathrooms, etc.). In general, buildings that have been substantially rehabilitated and vacated tend to have been stabilized properties. Therefore, when these buildings are substantially rehabilitated, the apartments are no longer subject to regulation and are considered new construction. This counts as a subtraction from the regulated stock. Notably, these properties do not receive J-51 tax incentives for rehabilitation.

In 2017, 211 units were removed from stabilization through substantial rehabilitation, 2% fewer than the prior year. By borough, the largest proportion of units leaving rent stabilization was in Brooklyn, with 45% of the units; followed by

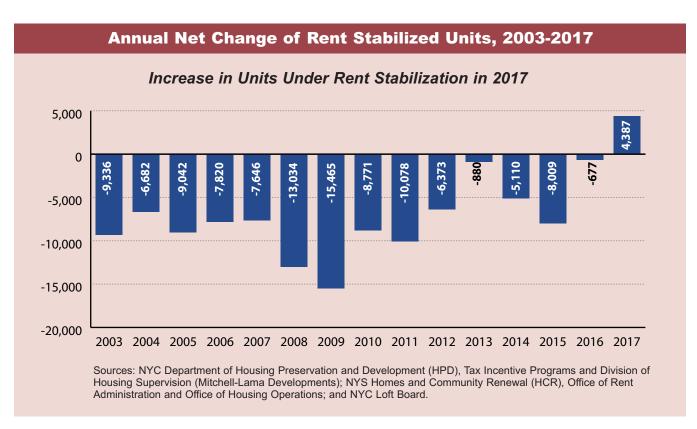
Manhattan (40%); and Queens (15%). No units were subtracted in the Bronx or Staten Island. A total of 9,478 units have been removed from the rent stabilization system through substantial rehabilitation since 1994. (See Appendix G.6.)

Conversion to Commercial or Professional Status

Space converted from residential use to commercial or professional use is no longer subject to rent regulation. In 2017, 24 units were converted to nonresidential use, compared to 160 the prior year. Since 1994, 2,472 residential units have been converted to nonresidential use. (See Appendix G.6.)

Other Losses to the Housing Stock

Owners may register units as permanently exempt when smaller units are merged into larger ones, or when the building is condemned, demolished or boarded-up/burnt-out. HCR annual registration data shows that 400 units were removed from the stabilized



housing stock in 2017 due to these reasons, a 9% decline from the prior year. By borough, the largest proportion of units leaving rent stabilization due to other losses was in Manhattan, with 66% of the units; followed by Brooklyn (16%); Queens (15%); and the Bronx (3%). No units were removed on Staten Island. Since 1994, 26,017 units have been removed from rent stabilization due to these other types of losses. (See Appendix G.6.)

Summary

In 2017, at least 6,657 housing units left rent stabilization and approximately 11,044 units initially entered the stabilization system.

The built-in fluidity of the system resulted in a net gain of 4,387 units in the rent stabilized housing stock in 2017, following an estimated net loss of 677 units in 2016. (See graph on previous page and Summary Table on next page.)

By borough, Brooklyn saw the most additions (56%); followed by Manhattan (20%); Queens (14%); the Bronx (7%); and Staten Island (3%). Units added to the stabilized stock in 2017 registered median legal rents of \$2,685, a 2% decrease from the prior year. The vast majority of units added were the result of the 421-a program, which comprised 85% of the additions, with an initial median rent of \$3,300 (See Appendices G.1 and G.2.)

Meanwhile, 56% of all units leaving rent stabilization were located in Manhattan, a total of 3,738 units. The second largest reduction was in Brooklyn, representing 21% removed; followed by Queens, 17%; the Bronx, 5%; and Staten Island, representing 1% of the total number of units removed from rent stabilization in 2017. High-Rent Vacancy Deregulation was the largest source of measured subtractions from the rent stabilized housing stock in 2017, accounting for 53% of the total decrease. (See Appendix G.7.)

Since 1994, the first year for which we have data, a total of at least 143,446 units have been added to the rent stabilization system, while a minimum of 290,958 rent stabilized units have been deregulated, for an estimated net loss of 147,512 units over the last 24 years.

Endnotes

- 1. The significant increase in the number of buildings added to the rent stabilized stock through the 421-a program may be attributable in part to enforcement, by the NYC Department of Housing Preservation and Development, the NYC Department of Finance, and the NYS Department of Homes and Community Renewal's Tenant Protection Unit, of applicable tax benefit rules, including initial rent stabilization registration requirements.
- The 2017 Housing and Vacancy Survey reported a total of 21,751 rent controlled units in New York City.
- The Rent Act of 2015, effective June 15, 2015, raised the Deregulation Rent Threshold for deregulation upon vacancy from \$2,500 to \$2,700, subsequently increased to \$2,733.75 effective January 1, 2018. See "High-Rent High-Income Deregulation" section on page 89 for more information.
- 4. The 420-c tax incentive program provides a complete exemption from real estate taxes for the term of the regulatory agreement (up to 30 years). While the RGB is unable to quantify the number of units that became rent stabilized since 2003, the previously reported figure for the period 1994-2002, 5,500 rent stabilized units created through the 420-c program, is assumed to be correct. The figure is based upon units identified in rental projects with funding sources that require rent stabilization.
- Article 11, 14 and 15 tax incentive programs encourage new construction or rehabilitation of affordable housing to be carried out by a Housing Development Fund Corporation (HDFC). The benefit consists of complete or partial exemption from real estate taxes for up to 40 years.
- The final count for petitions for High-Rent High-Income Deregulation may be slightly reduced as they are subject to appeal or in some cases, to review by a court of competent jurisdiction.
- Deregulation of certain high rent apartments was instituted in New York City twice before, in 1964 and in 1968.
- 8. An October 2009 court decision, <u>Roberts v Tishman Speyer Props.</u>, <u>L.P.</u>, found that about 4,000 apartments in the Stuyvesant Town and Peter Cooper Village complexes in Manhattan were improperly deregulated because the buildings were receiving J-51 tax benefits. This ruling affects other apartments deregulated elsewhere in the City but data on the precise number of units returned to rent stabilization status is unavailable.
- 9. Numbers may not add up to 100% due to rounding.

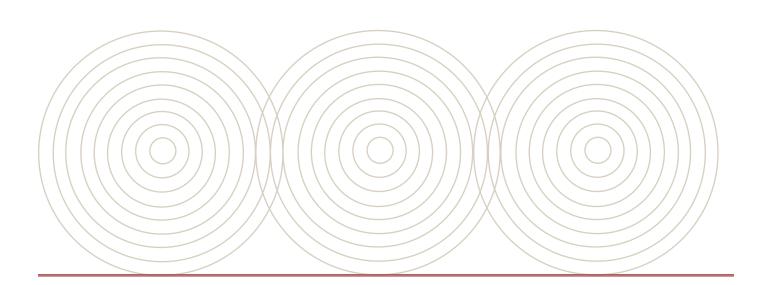
Summary Table of Additions and Subtractions to the Rent Stabilized Housing Stock in 2017

Program	Number of Units			
ADDITIONS				
421-a	+ 9,376			
J-51 conversions	+ 0			
Mitchell-Lama buyouts	+ 233			
Loft conversions	+ 10			
Article 11, 14 or 15	+ 1,283			
CHANGES	•			
Rent control to rent stabilization	+ 142			
Subtotal Additions & Changes	+ 11,044			
SUBTRACTIONS	•			
Co-op and Condo subtractions	- 672			
High-Rent Vacancy Deregulation	- 3,517			
High-Rent High-Income Deregulation	- 107			
421-a Expiration	- 1,363			
J-51 Expiration	- 363			
Substantial Rehabilitation	- 211			
Commercial/Professional Conversion	- 24			
Other Subtractions	- 400			
Subtotal Subtractions	- 6,657			
NET TOTAL				
Net Estimated Gain	+ 4,387			

Sources: NYC Department of Housing Preservation and Development (HPD), Tax Incentive Programs and Division of Housing Supervision (Mitchell-Lama Developments); NYS Homes and Community Renewal (HCR), Office of Rent Administration and Office of Housing Operations; and NYC Loft Board.

Appendices

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Appendix A: Guidelines Adopted by the Board

Appendix A: Guidelines Adopted by the Board

A.1 Apartments & Lofts - Order #50

On June 26, 2018, the Rent Guidelines Board (RGB) set the following maximum rent increases for leases commencing or being renewed on or after October 1, 2018 and on or before September 30, 2019 for rent stabilized apartments:

One-Year Lease	Two-Year Lease
1.5%	2.5%

In the event of a sublease governed by subdivision (e) of section 2525.6 of the Rent Stabilization Code, the allowance authorized by such subdivision shall be 10%.

No vacancy allowance is permitted except as provided by the Rent Regulation Reform Act of 1997 and the Rent Act of 2015.

For Loft units that are covered under Article 7-C of the Multiple Dwelling Law, the Board established the following maximum rent increases for increase periods commencing on or after October 1, 2018 and on or before September 30, 2019:

One-Year	Two-Year
Increase Period	Increase Period
1.5%	2.5%

Leases for units subject to rent control on September 30, 2018, which subsequently become vacant and then enter the stabilization system, are not subject to the above adjustments. The rents for these newly stabilized units are subject to review by the New York State Division of Housing and Community Renewal (DHCR). In order to aid DHCR in this review, the RGB has set a special guideline. For rent controlled units which become vacant after September 30, 2018, the special guideline shall be 39% above the maximum base rent.

A.2 Hotel Units - Order #48

On June 26, 2018, the Rent Guidelines Board (RGB) set the following maximum rent increases for leases commencing or being renewed on or after October 1,

2018 and on or before September 30, 2019 for rent stabilized hotels:

Single Room Occupancy Buildings (SRO)	0%
Lodging Houses	0%
Class A Hotels	0%
Class B Hotels	0%
Rooming Houses	0%

Appendix B: Price Index of Operating Costs

B.1 PIOC Sample, Number of Price Quotes per Item, 2017 vs. 2018

Spec #	Description	2017	2018	Spec #	Description	2017	2018
211	Apartment Value	63	87	817	Large Trash Bags	-	13
212	Non-Union Super	59	63	818	Smoke Detectors	-	9
216	Non-Union Janitor/Porter	37	28	902	Refrigerator #2	12	12
				903	Air Conditioner #1	8	10
	LABOR COSTS	159	178	906	Dishwasher	12	12
				908	Range #2	12	12
301	Fuel Oil #2	32	32	909	Carpet	10	10
302	Fuel Oil #4	11	11	910	Dresser	6	5
	FUEL OIL	43	43	911	Mattress & Box Spring	5	9
	FUEL OIL	43	43				
501	Denointing	126	99		MAINTENANCE	506	451
502	Repainting	32	99 31				
	Plumbing, Faucet			601	Management Fees	51	41
503 504	Plumbing, Stoppage	29	29	602	Accountant Fees	29	26
	Elevator #1, 6 fl., 1 e.	10	8	603	Attorney Fees	21	22
505	Elevator #2, 13 fl., 2 e.	10	6	604	Newspaper Ads	20	16
506	Elevator #3, 19 fl., 3 e.	10	6	607	Bill Envelopes	11	11
507 508	Burner Repair	10 11	9 9	608	P.O. Box	10	10
	Boiler Repair, Tube	9	9 7	609	Copy Paper	11	11
509	Boiler Repair, Weld						
510	Refrigerator Repair	8	5 5				
511 512	Range Repair	10 22	5 16		ADMINISTRATIVE COSTS	153	137
	Roof Repair	6	7				
514 515	Floor Maint. #1, Studio Floor Maint. #2, 1 Br.	6	7	701	INSURANCE COSTS	294	463
516	Floor Maint. #3, 2 Br.	6	7				
517	Extermination Services	-	8				
517	Linen/Laundry Service	6	o 5				
519	Electrician Services	-	12		ALL ITEMS	1,155	1,272
805	Paint	- 11	9		7121121110	1,100	.,
808	Bucket	13	12				
810	Linens	10	11				
811	Pine Disinfectant	13	11				
	Switch Plate						
813	Toilet Seat	11	11 15				
815		15 15	15 14				
816	Deck Faucet	15	14				

(CONTINUED, TOP RIGHT)

NOTE: Specs 517, 519, 817 and 818 are newly added for 2018. Specs 901 (Refrigerator #1), 904 (Air Conditioner #2), 905 (Floor Runner), 907 (Range #1), 801 (Light Bulbs), 802 (Light Switch), 803 (Wet Mop), 804 (Floor Wax), 806 (Pushbroom), 807 (Detergent), 809 (Washers), 812 (Window Cleaner), 814 (Duplex Receptacle), and 513 (Air Conditioner Repair) were removed.

B.2 Expenditure Weights, Price Relatives, Percent Changes and Standard Errors, All Apartments, 2018

201 Payroll, Bronx, All (Union) 0.0947 1.0182 1.82% 0.0000 811 Pine Disinfectant 0.0077 0.9861 -1.39% 202 Payroll, Other, Union, Supts. 0.0972 1.0286 2.86% 0.0000 813 Switch Plate 0.0054 0.9945 -0.55% 203 Payroll, Other, Union, Other 0.2438 1.0300 3.00% 0.0000 815 Toilet Seat 0.0124 1.0518 5.18% 204 Payroll, Other, Non-Union, All 0.3030 1.0508 5.08% 2.2045 816 Deck Faucet 0.0156 1.0232 2.32% 205 Social Security Insurance 0.0423 1.0368 3.68% 0.0000 817 Large Trash Bags 0.0127 1.0027 0.27% 206 Unemployment Insurance 0.0042 0.8717 -12.83% 0.0000 818 Smoke Detectors 0.0127 0.9526 -4.74% 207 Private Health & Welfare 0.2147 1.0172 1.72% 0.0000 902 Refrigerator #2 <th>ec It</th> <th>tem Description</th> <th>Expenditure Weight</th> <th>e Price Relative</th> <th>% Change</th> <th>Standard Error</th> <th>Spec #</th> <th>Item Description</th> <th>Expenditur Weight</th> <th>e Price Relative</th> <th>% Change</th> <th>Standard Error</th>	ec It	tem Description	Expenditure Weight	e Price Relative	% Change	Standard Error	Spec #	Item Description	Expenditur Weight	e Price Relative	% Change	Standard Error
201 Payroll, Bronx, All (Union) 0.0947 1.0182 1.82% 0.0000 811 Pine Disinfectant 0.0077 0.9861 1.39% 0.3982 2.94yroll, Other, Union, Supta 0.2438 0.0000 813 Switch Plate 0.0054 0.0945 0.55% 0.9494 0.05% 0.9495 0.0000	1 T	TAXES	0.2988	1.0632	6.32%	0.0281	805	Paint	0.0294	1.0354	3.54%	1.0514
Payroll, Other, Union, Supts 0.0972 1.0286 2.86% 0.0000 813 Switch Plate 0.0054 0.9945 0.55%							808	Bucket	0.0055	0.9745	-2.55%	2.3123
Payroll, Other, Union, Other 0.2438 1.0300 3.00% 0.0000 815 Tollet Seat 0.0124 1.0518 5.18%	1 F	Payroll, Bronx, All (Union)	0.0947	1.0182	1.82%	0.0000	811	Pine Disinfectant	0.0077	0.9861	-1.39%	3.0524
Payroll, Other, Non-Union, All 0.3030 1.0508 5.08% 2.2045 816 Deck Faucet 0.0156 1.0232 2.32%	2 F	Payroll, Other, Union, Supts.	0.0972	1.0286	2.86%	0.0000	813	Switch Plate	0.0054	0.9945	-0.55%	2.1259
205 Social Security Insurance 0.0423 1.0368 3.68% 0.0000 817 Large Trash Bags 0.0127 1.0027 0.27% 0.27% 0.0000 1818 Smoke Detectors 0.0127 0.9526 4.74% 0.0000 0.27% 0.0000 0.27% 0.0000 0.0000 0.0000 0.00000 0.0000 0.00000 0.0000 0.000000 0.000000 0.00000 0.00000 0.00000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.00000 0.00000 0.000000 0.00000000	3 F	Payroll, Other, Union, Other	0.2438	1.0300	3.00%	0.0000	815	Toilet Seat	0.0124	1.0518	5.18%	6.8712
200 Unemployment Insurance 0.0042 0.8717 -12.83% 0.0000 818 Smoke Detectors 0.0127 0.9526 -4.74% 0.777 1.0301 3.01% 0.0000 902 Refrigerator #2 0.0377 1.0301 3.01% 0.0000 0.0014 1.0417 4.17% 0.0000 0.0014 1.0417 4.17% 0.0000 0.0000 0.0014 0.0014 1.0417 4.17% 0.00000 0.00000 0.0000	4 F	Payroll, Other, Non-Union, A	II 0.3030	1.0508	5.08%	2.2045	816	Deck Faucet	0.0156	1.0232	2.32%	3.5341
207 Private Health & Weiflare 0.2147 1.0172 1.72% 0.0000 902 Refrigerator #2 0.0377 1.0301 3.01% 903 Air Conditioner #1 0.0014 1.0417 4.17% 1.72% 0.0000 903 Air Conditioner #1 0.0014 1.0417 4.17% 1.72% 0.0000 905 Air Conditioner #1 0.0014 1.0417 4.17% 1.72% 0.0000 905 Air Conditioner #1 0.0014 1.0417 4.17% 1.72% 0.0000 905 Air Conditioner #1 0.0014 1.0417 4.17% 1.72% 0.0000 906 Dibwasher 908 Range #2 0.0175 0.9818 -1.82% 0.00000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.00000	5 S	Social Security Insurance	0.0423	1.0368	3.68%	0.0000	817	Large Trash Bags	0.0127	1.0027	0.27%	2.9836
LABOR COSTS LABOR COSTS 1.0319 3.19% 0.6681 908 0.6681 908 0.0040 0.9672 3.28% 908 0.0040 0.9672 3.28% 908 0.0040 0.9672 3.28% 908 0.0040 0.9672 3.28% 908 0.0040 0.9672 3.28% 908 0.0040 0.9672 3.28% 908 0.0040 0.9672 3.28% 908 0.0040 0.9672 3.28% 908 0.0040 0.9672 3.28% 908 0.0040 0.9672 3.28% 908 0.0040 0.9672 0.0040 0.9672 0.0040 0.9672 0.0040 0.9672 0.0040 0.9672 0.0040 0.9672 0.0040 0.9672 0.0040 0.9688 0.0040 0.9	6 L	Jnemployment Insurance	0.0042	0.8717	-12.83%	0.0000	818	Smoke Detectors	0.0127	0.9526	-4.74%	4.5193
LABOR COSTS 0.1672 1.0319 3.19% 0.6681 906 Dishwasher 908 Range #2 0.0040 0.9672 3.28% 908 Range #2 0.0175 0.9818 -1.82% 302 Fuel Oil #4 0.1545 1.2169 21.69% 1.2079 MAINTENANCE 0.1793 1.0344 3.44% 405 Gas #2, 65,000 therms 0.0916 1.1606 16.06% 0.0000 601 Management Fees 0.5285 1.0081 0.81% 0.8626 0.0000 602 Accountant Fees 0.5285 1.0081 0.81% 0.8626 0.0000 602 Accountant Fees 0.1250 1.0256 2.56% 0.0000 603 Attorney Fees 0.2160 1.0450 4.50% 607 Bill Envelopes 0.0211 1.0148 1.48% 0.8010 608 P.O. Box 0.0221 1.0450 4.50% 608 P.O. Box 0.0221 1.0264 2.64% 0.0000 409 Communications 0.0255 0.9549 4.51% 0.0044 4.63 4.11644 1.0048 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.	7 F	Private Health & Welfare	0.2147	1.0172	1.72%	0.0000	902	Refrigerator #2	0.0377	1.0301	3.01%	1.3136
301 Fuel Oil #2 0.2739 1.1894 18.94% 0.8626 302 Fuel Oil #4 0.1545 1.2169 21.69% 1.2079 0.00000 0.0000 0.00000 0.0000 0.0000 0.00000 0.00000 0.00000 0							903	Air Conditioner #1	0.0014	1.0417	4.17%	2.4005
Sue Oil #2 0.2739 1.1894 18.94% 0.8626 1.000 1.1606 1.0006 0.0000 0.000	L	ABOR COSTS	0.1672	1.0319	3.19%	0.6681	906	Dishwasher	0.0040	0.9672	-3.28%	3.7348
Sue Oil							908	Range #2	0.0175	0.9818	-1.82%	2.3689
Sue Oil	1 F	Fuel Oil #2	0.2739	1.1894	18.94%	0.8626		-				
405 Gas #2, 65,000 therms 0.0916 1.1606 16.06% 0.0000 601 Management Fees 0.5285 1.081 0.81% 406 Gas #3, 214,000 therms 0.3663 1.1528 15.28% 0.0000 602 Accountant Fees 0.1250 1.0250 2.56% 407 Steam #1, 1.2m lbs 0.0203 1.0397 3.97% 0.0000 602 Accountant Fees 0.2160 1.0450 4.50% 408 Steam #2, 2.6m lbs 0.0203 1.0397 3.97% 0.0000 603 Attorney Fees 0.2160 1.0450 4.50% 401 Electricity #1, 2,500 KWH 0.0197 1.0150 1.50% 0.0000 609 Copy Paper 0.0211 1.0168 1.48% 404 Electricity #1, 2,500 KWH 0.0197 1.0150 1.55% 0.0000 409 Communications 0.0555 0.9549 -4.51% 404 Gas #1, 12,000 therms 0.0736 1.0060 0.05% 0.0000 409 Communications 0.0551								MAINTENANCE	0.1793	1.0344	3.44%	0.4232
406 Gas #3, 214,000 therms 0.3963 1.1528 15.28% 0.0000 601 Management Fees 0.5285 1.0081 0.81% 407 Steam #1, 1.2m lbs 0.0635 1.0464 4.64% 0.0000 602 Accountant Fees 0.1250 1.0256 2.56% 408 Steam #2, 2.6m lbs 0.0203 1.0397 3.97% 0.0000 603 Attorney Fees 0.2160 1.0450 4.56% 408 Steam #2, 2.6m lbs 0.0644 1.1644 16.44% 0.3010 604 Newspaper Ads 0.0105 1.0162 1.28% 401 Electricity #1, 2,500 KWH 0.0197 1.0150 1.55% 0.0000 609 Copy Paper 0.0215 1.0060 0.60% 402 Electricity #2, 15,000 KWH 0.0274 1.1056 10.55% 0.0000 409 Communications 0.0215 1.0060 0.60% 401 Water & Sewer 0.7306 1.0048 0.48% 0.0000 701 INSURANCE COSTS 0.0513 1.0332 <td></td>												
407 Steam #1, 1.2m lbs 0.0635 1.0464 4.64% 0.0000 602 Accountant Fees 0.1250 1.0256 2.56% 408 Steam #2, 2.6m lbs 0.0203 1.0397 3.97% 0.0000 603 Attorney Fees 0.2160 1.0450 4.56% 408 FUEL 0.0644 1.1644 16.44% 0.3010 604 Newspaper Ads 0.015 1.0126 1.26% 401 Electricity #1, 2,500 KWH 0.0197 1.0150 1.50% 0.0000 609 Copy Paper 0.0215 1.060 0.60% 402 Electricity #2, 15,000 KWH 0.02423 1.0152 1.55% 0.0000 409 Communications 0.0555 0.9549 -4.51% 404 Gas #1, 12,000 therms 0.074 1.1056 10.56% 0.0000 409 Communications 0.0555 0.9549 -4.51% 410 Water & Sewer 0.7306 1.0000 0.00% 0.0000 701 INSURANCE COSTS 0.1356 1.0158 1.5							601	Management Fees	0.5285	1.0081	0.81%	1.7612
AURILITIES 1.0000 1.0100								•				1.7148
FUEL 1.644 1.1644 1.644 1.644 0.3010 607 8ill Envelopes 0.0211 1.0148 1.48% 1.4		· · · · · · · · · · · · · · · · · · ·										2.5957
FUEL 0.0644 1.1644 16.44% 0.3010 607 Bill Envelopes 0.0211 1.0148 1.48% 401 Electricity #1, 2,500 KWH 0.0197 1.0150 1.50% 0.0000 609 Copy Paper 0.0215 1.0060 0.60% 402 Electricity #2, 15,000 KWH 0.2423 1.0152 1.52% 0.0000 409 Communications 0.0555 0.9549 -4.51% 404 Gas #1, 12,000 therms 0.0074 1.1056 10.56% 0.0000 409 Communications 0.0555 0.9549 -4.51% 410 Water & Sewer 0.7306 1.0000 0.00% 0.0000 701 INSURANCE COSTS 0.1356 1.0158 1.58% 0.0000 701 INSURANCE COSTS 0.1356 1.0158 1.58% 0.0000 701 INSURANCE COSTS 0.1356 1.0158 1.58% 0.0000 701 INSURANCE COSTS 0.0513 1.0332 3.32% 0.0000 Flewator #1, 6 fl., 1 e. 0.0212 1.0490 4.90% 1.7639 507 Burner Repair 0.0327 1.0230 2.30% 1.7639 508 Boiler Repair, Tube 0.0400 1.0302 3.02% 2.9108 509 Boiler Repair, Tube 0.0400 1.0302 3.02% 2.9963 510 Refrigerator Repair 0.0130 1.0583 5.83% 4.2823 511 Range Repair 0.0115 1.1167 11.67% 5.6723 516 Floor Maint. #1, Studio 0.0036 1.0320 3.22% 2.3966 510 Floor Maint. #1, Studio 0.0036 1.0320 3.22% 2.3986 510 Floor Maint. #2, 1 Br. 0.0061 1.0321 3.21% 2.3920 510 Floor Maint. #2, 1 Br. 0.0061 1.0321 3.22% 2.3966 510 Floor Maint. #3, 2 Br. 0.0551 1.0322 3.22% 2.3966	0 0	5toan #2, 2.0m 155	0.0200	1.0007	0.07 /0	0.0000		•				0.7918
608 P.O. Box 0.0220 1.0264 2.64% 401 Electricity #1, 2,500 KWH 0.0197 1.0150 1.50% 0.0000 609 Copy Paper 0.0215 1.0060 0.60% 402 Electricity #2, 15,000 KWH 0.2423 1.0152 1.52% 0.0000 409 Communications 0.0555 0.9549 -4.51% 404 Gas #1, 12,000 therms 0.074 1.1056 10.56% 0.0000 410 Water & Sewer 0.7306 1.0000 0.00% 0.0000 ADMINISTRATIVE COSTS 0.1356 1.0158 1.58% UTILITIES 0.1034 1.0048 0.48% 0.0000 701 INSURANCE COSTS 0.9513 1.0332 3.32% 501 Repainting 0.2262 1.0627 6.27% 1.1710 502 Plumbing, Faucet 0.1080 1.0242 2.42% 0.9129 503 Plumbing, Stoppage 0.0987 1.0292 2.92% 1.0119 505 Elevator #3, 19 fl., 3 e. 0.0131 1.0738 7.38% 3.9291 505 Elevator #3, 19 fl., 3 e. 0.0073 1.0949 9.49% 4.7679 507 Burner Repair 0.0327 1.0230 2.30% 1.9380 508 Boiler Repair, Tube 0.0400 1.0302 3.02% 2.9108 509 Boiler Repair, Weld 0.0353 1.0297 2.97% 2.9633 510 Refrigerator Repair 0.0115 1.1167 11.67% 5.6723 512 Roof Repair 0.0151 1.0320 3.20% 2.3881 515 Floor Maint. #1, Studio 0.0036 1.0320 3.20% 2.3981 516 Floor Maint. #1, Studio 0.0036 1.0320 3.20% 2.3986 516 Floor Maint. #2, 1 Br. 0.0061 1.0321 3.21% 2.3920 516 Floor Maint. #3, 2 Br. 0.0551 1.0322 3.22% 2.3966		:IIEI	0.0644	1 1644	16 ///0/	0.2010						1.3542
401 Electricity #1, 2,500 KWH 0.0197 1.0150 1.50% 0.0000 609 Copy Paper 0.0215 1.0060 0.60% 402 Electricity #2, 15,000 KWH 0.2423 1.0152 1.52% 0.0000 409 Communications 0.0555 0.9549 -4.51% 404 Gas #1, 12,000 therms 0.0074 1.1056 10.56% 0.0000 409 Communications 0.0555 0.9549 -4.51% 410 Water & Sewer 0.7306 1.0000 0.00% 0.0000 701 INSURANCE COSTS 0.1356 1.0158 1.58% UTILITIES 0.1034 1.0048 0.48% 0.0000 701 INSURANCE COSTS 0.1356 1.0158 1.58% 0.1019 1.00		-OEL	0.0044	1.1044	10.44 /0	0.3010		·				0.8512
402 Electricity #2, 15,000 KWH 403 Electricity #2, 15,000 KWH 404 Gas #1, 12,000 therms 405 O.0000 407 O.0000 408 O.0000 408 O.0000 409 Communications 409 Communications 409 O.0055 0.9549 -4.51% 408 Gas #1, 12,000 therms 410 Water & Sewer 410 Water & Sewer 410 O.1034 1.0048 0.48% 0.0000 411 O.1034 1.0048 0.48% 0.0000 42 O.0000 1.0355 0.9549 -4.51% 42 O.0051 1.0158 1.58% 42 O.0051 1.0158 1.58% 42 O.0051 1.0158 1.0332 3.32% 42 O.0051 1.0158 1.0332 3.32% 43 O.0000 1.0119 44 O.0000 1.0242 2.42% 0.9129 44 O.0000 1.0242 2.42% 0.9129 45 O.0000 1.0242 2.42% 0.9129 45 O.0000 1.0242 2.42% 0.9129 46 O.0000 1.0242 2.42% 0.9129 47 O.0000 1.0340 1.0340 1.0349 48 O.0000 1.0349 0.94% 1.0399 48 O.0000 1.0349 0.94% 1.0399 49 O.0000 1.0340 0.0036 1.0349 0.0000 409 Communications 4	4 6	Flootricity #1 0 FOO KINU	0.0107	1.0150	1 500/	0.0000						2.2491
404 Gas #1, 12,000 therms		• • •						., .				0.0000
Mater & Sewer 0.7306 1.0000 0.00% 0.0000 0.0000 ADMINISTRATIVE COSTS 0.1356 1.0158 1.58%		• • •					403	Communications	0.0555	0.5545	-4.51/0	0.0000
UTILITIES 0.1034 1.0048 0.48% 0.0000 701 INSURANCE COSTS 0.0513 1.0332 3.32% 1.0332 3.32% 1.0332 3.32% 1.0332 3.32% 1.0119 1.0242 2.42% 0.9129 1.0292 2.92% 1.0119 1.0490 4.90% 1.7639 1.0490 4.90% 1.7639 1.0490 4.90% 1.7639 1.0490 4.90% 1.7639 1.0490 4.90% 1.7639 1.0490 4.90% 1.7639 1.0490 4.90% 1.7639 1.0490 4.90% 1.7639 1.0490 4.90% 1.7639 1.0490 4.90% 1.7639 1.0490 4.7679 1.0490 4.90% 1.9380 1.0490 1.04530 4.53% 1.0000 1.04530 4.53% 1.0000 1.04530 4.53% 1.0000 1.04530 4.53% 1.0000 1.04530 4.53% 1.0000 1.04530 4.53% 1.0000 1.04530 4.53% 1.0000 1.04530 4.53% 1.0000 1.04530 4.53% 1.0000 1.04530 4.53% 1.0000 1.04530 4.53% 1.0000 1.04530 4.53% 1.0000 1.04530 4.53% 1.0000 1.04530 4.53% 1.0000 1.04530 4.53% 1.0000 1.04530 4.53% 1.0000 1.04530 4.53%								ADMINISTRATIVE COSTS	0.1256	1.0150	1 500/	1 1001
501 Repainting	0 V	valer & Sewer	0.7306	1.0000	0.00%	0.0000		ADMINISTRATIVE COSTS	0.1350	1.0156	1.30%	1.1091
502 Plumbing, Faucet 0.1080 1.0242 2.42% 0.9129 503 Plumbing, Stoppage 0.0987 1.0292 2.92% 1.0119 504 Elevator #1, 6 fl., 1 e. 0.0212 1.0490 4.90% 1.7639 505 Elevator #2, 13 fl., 2 e. 0.0131 1.0738 7.38% 3.9291 ALL ITEMS 506 Elevator #3, 19 fl., 3 e. 0.0073 1.0949 9.49% 4.7679 507 Burner Repair 0.0327 1.0230 2.30% 1.9380 508 Boiler Repair, Tube 0.0400 1.0302 3.02% 2.9108 509 Boiler Repair, Weld 0.0353 1.0297 2.97% 2.9633 510 Refrigerator Repair 0.0130 1.0583 5.83% 4.2823 511 Range Repair 0.0476 1.0377 3.77% 1.5333 512 Roof Repair 0.0476 1.0320 3.20% 2.3881 515 Floor Maint. #1, Studio 0.0061 1.0321 3.21% 2.3920 516 Floor Maint. #3, 2 Br. 0.0551	L	JTILITIES	0.1034	1.0048	0.48%	0.0000	701	INSURANCE COSTS	0.0513	1.0332	3.32%	0.6460
503 Plumbing, Stoppage 0.0987 1.0292 2.92% 1.0119 504 Elevator #1, 6 fl., 1 e. 0.0212 1.0490 4.90% 1.7639 505 Elevator #2, 13 fl., 2 e. 0.0131 1.0738 7.38% 3.9291 ALL ITEMS 1.0000 1.04530 4.53% 506 Elevator #3, 19 fl., 3 e. 0.0073 1.0949 9.49% 4.7679 507 Burner Repair 0.0327 1.0230 2.30% 1.9380 508 Boiler Repair, Tube 0.0400 1.0302 3.02% 2.9108 509 Boiler Repair, Weld 0.0353 1.0297 2.97% 2.9633 510 Refrigerator Repair 0.0130 1.0583 5.83% 4.2823 511 Range Repair 0.0115 1.1167 11.67% 5.6723 512 Roof Repair 0.0476 1.0327 3.20% 2.3881 515 Floor Maint. #1, Studio 0.0061 1.0321 3.21% 2.3920 516 Floor Maint. #3, 2 Br. 0.0551 1.0322 3.22% 2.3966	1 F	Repainting	0.2262	1.0627	6.27%	1.1710						
Elevator #1, 6 fl., 1 e. 0.0212 1.0490 4.90% 1.7639 Elevator #2, 13 fl., 2 e. 0.0131 1.0738 7.38% 3.9291 Elevator #3, 19 fl., 3 e. 0.0073 1.0949 9.49% 4.7679 Elevator Repair 0.0327 1.0230 2.30% 1.9380 Boiler Repair, Tube 0.0400 1.0302 3.02% 2.9108 Boiler Repair, Weld 0.0353 1.0297 2.97% 2.9633 Elevator Repair 0.0115 1.1167 11.67% 5.6723 Elevator Repair 0.0476 1.0377 3.77% 1.5333 Floor Maint. #1, Studio 0.0036 1.0320 3.20% 2.3881 Floor Maint. #2, 1 Br. 0.0061 1.0321 3.21% 2.3920 Floor Maint. #3, 2 Br. 0.0551 1.0322 3.22% 2.3966	2 F	Plumbing, Faucet	0.1080	1.0242	2.42%	0.9129						
505 Elevator #2, 13 fl., 2 e. 0.0131 1.0738 7.38% 3.9291 ALL ITEMS 506 Elevator #3, 19 fl., 3 e. 0.0073 1.0949 9.49% 4.7679 507 Burner Repair 0.0327 1.0230 2.30% 1.9380 508 Boiler Repair, Tube 0.0400 1.0302 3.02% 2.9108 509 Boiler Repair, Weld 0.0353 1.0297 2.97% 2.9633 510 Refrigerator Repair 0.0130 1.0583 5.83% 4.2823 511 Range Repair 0.0115 1.1167 11.67% 5.6723 512 Roof Repair 0.0476 1.0377 3.77% 1.5333 514 Floor Maint. #1, Studio 0.0036 1.0320 3.20% 2.3881 515 Floor Maint. #2, 1 Br. 0.0061 1.0321 3.21% 2.3920 516 Floor Maint. #3, 2 Br. 0.0551 1.0322 3.22% 2.3966	3 F	Plumbing, Stoppage	0.0987	1.0292	2.92%	1.0119						
506 Elevator #3, 19 fl., 3 e. 0.0073 1.0949 9.49% 4.7679 507 Burner Repair 0.0327 1.0230 2.30% 1.9380 508 Boiler Repair, Tube 0.0400 1.0302 3.02% 2.9108 509 Boiler Repair, Weld 0.0353 1.0297 2.97% 2.9633 510 Refrigerator Repair 0.0130 1.0583 5.83% 4.2823 511 Range Repair 0.0115 1.1167 11.67% 5.6723 512 Roof Repair 0.0476 1.0377 3.77% 1.5333 514 Floor Maint. #1, Studio 0.0036 1.0320 3.20% 2.3881 515 Floor Maint. #2, 1 Br. 0.0061 1.0321 3.21% 2.3920 516 Floor Maint. #3, 2 Br. 0.0551 1.0322 3.22% 2.3966	4 E	Elevator #1, 6 fl., 1 e.	0.0212	1.0490	4.90%	1.7639						
507 Burner Repair 0.0327 1.0230 2.30% 1.9380 508 Boiler Repair, Tube 0.0400 1.0302 3.02% 2.9108 509 Boiler Repair, Weld 0.0353 1.0297 2.97% 2.9633 510 Refrigerator Repair 0.0130 1.0583 5.83% 4.2823 511 Range Repair 0.0115 1.1167 11.67% 5.6723 512 Roof Repair 0.0476 1.0377 3.77% 1.5333 514 Floor Maint. #1, Studio 0.0036 1.0320 3.20% 2.3881 515 Floor Maint. #2, 1 Br. 0.0061 1.0321 3.21% 2.3920 516 Floor Maint. #3, 2 Br. 0.0551 1.0322 3.22% 2.3966	5 E	Elevator #2, 13 fl., 2 e.	0.0131	1.0738	7.38%	3.9291		ALL ITEMS	1.0000	1.04530	4.53%	0.2059
508 Boiler Repair, Tube 0.0400 1.0302 3.02% 2.9108 509 Boiler Repair, Weld 0.0353 1.0297 2.97% 2.9633 510 Refrigerator Repair 0.0130 1.0583 5.83% 4.2823 511 Range Repair 0.0115 1.1167 11.67% 5.6723 512 Roof Repair 0.0476 1.0377 3.77% 1.5333 514 Floor Maint. #1, Studio 0.0036 1.0320 3.20% 2.3881 515 Floor Maint. #2, 1 Br. 0.0061 1.0321 3.21% 2.3920 516 Floor Maint. #3, 2 Br. 0.0551 1.0322 3.22% 2.3966	6 E	Elevator #3, 19 fl., 3 e.	0.0073	1.0949	9.49%	4.7679						
509 Boiler Repair, Weld 0.0353 1.0297 2.97% 2.9633 510 Refrigerator Repair 0.0130 1.0583 5.83% 4.2823 511 Range Repair 0.0115 1.1167 11.67% 5.6723 512 Roof Repair 0.0476 1.0377 3.77% 1.5333 514 Floor Maint. #1, Studio 0.0036 1.0320 3.20% 2.3881 515 Floor Maint. #2, 1 Br. 0.0061 1.0321 3.21% 2.3920 516 Floor Maint. #3, 2 Br. 0.0551 1.0322 3.22% 2.3966	7 E	Burner Repair	0.0327	1.0230	2.30%	1.9380						
510 Refrigerator Repair 0.0130 1.0583 5.83% 4.2823 511 Range Repair 0.0115 1.1167 11.67% 5.6723 512 Roof Repair 0.0476 1.0377 3.77% 1.5333 514 Floor Maint. #1, Studio 0.0036 1.0320 3.20% 2.3881 515 Floor Maint. #2, 1 Br. 0.0061 1.0321 3.21% 2.3920 516 Floor Maint. #3, 2 Br. 0.0551 1.0322 3.22% 2.3966	8 E	Boiler Repair, Tube	0.0400	1.0302	3.02%	2.9108						
510 Refrigerator Repair 0.0130 1.0583 5.83% 4.2823 511 Range Repair 0.0115 1.1167 11.67% 5.6723 512 Roof Repair 0.0476 1.0377 3.77% 1.5333 514 Floor Maint. #1, Studio 0.0036 1.0320 3.20% 2.3881 515 Floor Maint. #2, 1 Br. 0.0061 1.0321 3.21% 2.3920 516 Floor Maint. #3, 2 Br. 0.0551 1.0322 3.22% 2.3966	9 E	Boiler Repair, Weld	0.0353	1.0297	2.97%	2.9633						
511 Range Repair 0.0115 1.1167 11.67% 5.6723 512 Roof Repair 0.0476 1.0377 3.77% 1.5333 514 Floor Maint. #1, Studio 0.0036 1.0320 3.20% 2.3881 515 Floor Maint. #2, 1 Br. 0.0061 1.0321 3.21% 2.3920 516 Floor Maint. #3, 2 Br. 0.0551 1.0322 3.22% 2.3966												
512 Roof Repair 0.0476 1.0377 3.77% 1.5333 514 Floor Maint. #1, Studio 0.0036 1.0320 3.20% 2.3881 515 Floor Maint. #2, 1 Br. 0.0061 1.0321 3.21% 2.3920 516 Floor Maint. #3, 2 Br. 0.0551 1.0322 3.22% 2.3966												
514 Floor Maint. #1, Studio 0.0036 1.0320 3.20% 2.3881 515 Floor Maint. #2, 1 Br. 0.0061 1.0321 3.21% 2.3920 516 Floor Maint. #3, 2 Br. 0.0551 1.0322 3.22% 2.3966												
515 Floor Maint. #2, 1 Br. 0.0061 1.0321 3.21% 2.3920 516 Floor Maint. #3, 2 Br. 0.0551 1.0322 3.22% 2.3966		·										
516 Floor Maint. #3, 2 Br. 0.0551 1.0322 3.22% 2.3966												
317 Extermination Jetyles 0.0403 1.0143 1.4370 1.2022												
519 Electrician Services 0.0723 1.0052 0.52% 0.3797												
318 Electrician Services 0.0723 1.0032 0.32% 0.3787	<i>9</i> E	LICOMOIAN SELVICES	0.0723	1.0052	∪.3∠%	0.3/8/						

(CONTINUED, TOP RIGHT)

NOTE: Specs 517, 519, 817 and 818 are newly added for 2018. Specs 901 (Refrigerator #1), 904 (Air Conditioner #2), 905 (Floor Runner), 907 (Range #1), 801 (Light Bulbs), 802 (Light Switch), 803 (Wet Mop), 804 (Floor Wax), 806 (Pushbroom), 807 (Detergent), 809 (Washers), 812 (Window Cleaner), 814 (Duplex Receptacle), and 513 (Air Conditioner Repair) were removed.

Appendix B: Price Index of Operating Costs

B.3 Price Relative by Building Type, Apartments, 2018

Component Description	Pre- 1947	Post- 1946	Gas Heated	Oil Heated
TAXES	6.6%	5.8%	6.3%	6.3%
LABOR COSTS	3.4%	2.9%	3.5%	3.2%
FUEL	17.3%	13.6%	15.4%	19.9%
UTILITIES	0.5%	0.5%	0.5%	0.5%
MAINTENANCE	3.4%	3.4%	3.5%	3.4%
ADMINISTRATIVE COSTS	1.6%	1.5%	1.6%	1.6%
INSURANCE COSTS	3.3%	3.3%	3.3%	3.3%
ALL ITEMS	4.9%	4.0%	4.4%	5.1%

B.4 Price Relative by Hotel Type, 2018

Component Description	Hotel	Rooming House	SRO
TAXES	-1.4%	5.8%	3.9%
LABOR COSTS	3.8%	4.0%	4.3%
FUEL	14.5%	18.9%	14.9%
UTILITIES	0.4%	2.8%	0.7%
MAINTENANCE	3.8%	3.6%	3.3%
ADMINISTRATIVE COSTS	-0.1%	1.5%	1.1%
INSURANCE COSTS	3.3%	3.3%	3.3%
ALL ITEMS	1.9%	6.0%	5.5%

B.5 Percentage Change in Real Estate Tax Sample by Borough and Source of Change, Apartments and Hotels, 2018

	% Change Due to Assessments	% Change Due to Exemptions	% Change Due to Tax Rates	% Change Due to Abatements	% Change Due to Interactions*	Total % Change
APARTMENTS						
Manhattan Bronx Brooklyn Queens Staten Island	7.8% 9.4% 11.9% 9.1% 8.1%	-0.4% -2.3% -3.1% -0.8% 1.1%	-1.3% -1.1% -1.4% -1.3% -1.4%	0.1% 0.6% -0.1% -0.5% -0.2%	-0.1% -0.1% -0.1% -0.1% -0.1%	6.1% 6.5% 7.3% 6.3% 7.5%
All Apartments HOTELS	9.0%	-1.0%	-1.3%	-0.2%	-0.1%	6.3%
Hotel Rooming House SRO	-0.9% 7.2% 6.3%	0.4% 0.0% -1.2%	-0.8% -1.3% -1.1%	-0.2% 0.0% 0.0%	0.0% -0.1% -0.1%	-1.4% 5.8% 3.9%
All Hotels	2.5%	-0.1%	-0.9%	-0.1%	0.0%	1.3%

Note: Totals may not add due to rounding.

B.6 Tax Change by Borough and Community Board, Apartments, 2018

Borough	Community Board	Number of Buildings	Tax Relative	Borough	Community Board	Number of Buildings	Tax Relative	Borough	Community Board	Number of Buildings	Tax Relative
Manhattan		12,234	6.07%		7	968	6.81%		17	644	10.36%
					8	355	6.24%		18	81	10.79%
	1	86	13.71%		9	309	6.14%	_			
	2	1,089	6.43%		10	223	7.05%	Queens		7,049	6.34%
	3	1,531	6.66%		11	332	8.68%		1	1,999	7.56%
	4	940	7.00%		12	513	3.94%		2	871	8.65%
	5	245	6.48%						3	497	6.56%
	6	799	5.55%	Brooklyn		13,295	7.30%		4	525	4.51%
	7	1,699	5.69%	2.00		10,200	1.0070		5	1,212	7.07%
	8	1,854	4.77%		1	1,675	0.93%		6	324	5.95%
	9	743	8.35%		2	617	4.99%		7	461	
	10	1,075	6.60%		3	1070	-3.10%				5.24%
	11	722	10.94%		4	1,417	7.81%		8	231	6.31%
	12	1,440	6.98%		5	465	12.42%		9	241	5.30%
Lauran		7 770	E 000/		6	892	7.18%		10	52	7.84%
Lower		7,779	5.80%		7	865	10.01%		11	125	7.32%
Llonor		4,455	7.74%		8	1,041	8.19%		12	220	5.77%
Upper		4,455	1.14%		9	588	8.89%		13	59	7.05%
Bronx		5,822	6.47%		10	794	6.16%		14	173	2.05%
BIOTIX		0,022	0.47 /0		11	712	8.54%				
	1	442	9.10%		12			Staten Isla	ind	177	7.46%
	2	281	9.28%			610	9.61%		1	130	6.42%
	3	388	-3.72%		13	181	4.50%		2	27	8.76%
	4	757	6.91%		14	885	8.68%		3	20	10.36%
	5	677	6.09%		15	363	6.57%		3		
	6	556	6.80%		16	386	13.02%	ALL		38,577	6.32%

Note: No Community Board (CB) could be assigned to the following number of buildings for each borough: Manhattan (10), Bronx (21), Brooklyn (9), Queens (59). The number of buildings in the category "ALL" for each borough includes the buildings that could not be assigned a Community Board. In addition, one building in Manhattan is a part of Community Board 8 in the Bronx. This building is not included in the total for CB 8 in the Bronx, but is represented in the Manhattan total and the total for "ALL" buildings. Core and Upper Manhattan building totals are defined by block count and cannot be calculated by using Community Board numbers alone.

^{*} Real estate tax interactions are the cumulative effects of changes in tax rates, assessments, exemptions and abatements in the same year, after subtracting out the individual effects of each of these changes. Interactions have minimal impact on the overall change in real estate taxes.

Appendix B: Price Index of Operating Costs

B.7 Expenditure Weights, Price Relatives, Percent Changes and Standard Errors, All Hotels, 2018

Spec #	Item Description	Expenditure Weight	e Price Relative	% Change	Standard Error	Spec #	Item Description	Expenditur Weight	e Price Relative	% Change	Standard Error
101	TAXES	0.4104	1.0129	1.29%	0.8890	518	Linen/Laundry Service	0.1186	1.0476	4.76%	4.8480
						519	Electrician Services	0.0228	1.0052	0.52%	0.3797
205	Social Security Insurance	0.0487	1.0368	3.68%	0.0000	805	Paint	0.0516	1.0354	3.54%	1.0514
206	Unemployment Insurance	0.0085	0.8717	-12.83%	0.0000	808	Bucket	0.0216	0.9745	-2.55%	2.3123
208	Hotel Private Health/Welfare	0.0565	1.0444	4.44%	0.0000	810	Linens	0.0702	0.9767	-2.33%	11.0769
209	Hotel Union Labor	0.3158	1.0350	3.50%	0.0000	811	Pine Disinfectant	0.0098	0.9861	-1.39%	3.0524
210	SRO Union Labor	0.0123	1.0350	3.50%	0.0000	813	Switch Plate	0.0141	0.9945	-0.55%	2.1259
211	Apartment Value	0.1165	1.0268	2.68%	0.5017	815	Toilet Seat	0.0197	1.0518	5.18%	6.8712
212	Non-Union Superintendent	0.3149	1.0533	5.33%	0.8429	816	Deck Faucet	0.0248	1.0232	2.32%	3.5341
216	Non-Union Janitor/Porter	0.1268	1.0439	4.39%	8.0657	817	Large Trash Bags	0.0303	1.0027	0.27%	2.9836
						818	Extermination Services	0.0303	0.9526	-4.74%	4.5193
	LABOR COSTS	0.1498	1.0401	4.01%	1.0578	902	Refrigerator #2	0.0134	1.0301	3.01%	1.3136
						903	Air Conditioner #1	0.0081	1.0417	4.17%	2.4005
301	Fuel Oil #2	0.6016	1.1894	18.94%	0.8626	908	Range #2	0.0056	0.9818	-1.82%	2.3689
302	Fuel Oil #4	0.0144	1.2169	21.69%	1.2079	909	Carpet	0.0433	1.0409	4.09%	3.0033
403	Electricity #3, 82,000 KWH	0.2228	1.0412	4.12%	0.0000	910	Dresser	0.0213	1.0768	7.68%	8.4192
405	Gas #2, 65,000 therms	0.0297	1.1606	16.06%	0.0000	911	Mattress & Box Spring	0.0183	1.0469	4.69%	5.2973
406	Gas #3, 214,000 therms	0.1312	1.1528	15.28%	0.0000						
407	Steam #1, 1.2m lbs	0.0003	1.0464	4.64%	0.0000		MAINTENANCE	0.1156	1.0375	3.75%	0.2436
	FUEL	0.1368	1.1511	15.11%	0.5192	601	Management Fees	0.5586	1.0081	0.81%	1.7612
						602	Accountant Fees	0.0608	1.0256	2.56%	1.7148
401	Electricity #1, 2,500 KWH	0.1307	1.0150	1.50%	0.0000	603	Attorney Fees	0.0873	1.0450	4.50%	2.5957
402	Electricity #2, 15,000 KWH	0.1360	1.0152	1.52%	0.0000	604	Newspaper Ads	0.0839	1.0126	1.26%	0.7918
404	Gas #1, 12,000 therms	0.0760	1.1056	10.56%	0.0000	607	Envelopes	0.0054	1.0148	1.48%	1.3542
410	Water & Sewer	0.6573	1.0000	0.00%	0.0000	608	P.O. Box	0.0057	1.0264	2.64%	0.8512
						609	Copy Paper	0.0056	1.0060	0.60%	2.2491
	UTILITIES	0.0470	1.0120	1.20%	0.0000	409	Communications	0.1927	0.9549	-4.51%	0.0000
501	Repainting	0.1350	1.0627	6.27%	1.1710		ADMINISTRATIVE COSTS	0.0939	1.0026	0.26%	1.0173
502	Plumbing, Faucet	0.0507	1.0242	2.42%	0.9129						
503	Plumbing, Stoppage	0.0491	1.0292	2.92%	1.0119	701	INSURANCE COSTS	0.0465	1.0332	3.32%	0.6460
504	Elevator #1, 6 fl., 1 e.	0.0221	1.0490	4.90%	1.7639						
505	Elevator #2, 13 fl., 2 e.	0.0189	1.0738	7.38%	3.9291						
506	Elevator #3, 19 fl., 3 e.	0.0172	1.0949	9.49%	4.7679						
507	Burner Repair	0.0163	1.0230	2.30%	1.9380						
508	Boiler Repair, Tube	0.0180	1.0302	3.02%	2.9108						
509	Boiler Repair, Weld	0.0188	1.0297	2.97%	4.2823						
511	Range Repair	0.0775	1.1167	11.67%	5.6723		ALL ITEMS	1.0000	1.0387	3.87%	0.4367
512	Roof Repair	0.0203	1.0377	3.77%	1.5333						
514	Floor Maint. #1, Studio	0.0005	1.0320	3.20%	2.3881						
515	Floor Maint. #2, 1 Br.	0.0009	1.0321	3.21%	2.3920						
516	Floor Maint. #3, 2 Br.	0.0083	1.0322	3.22%	2.3966						
517	Extermination Services	0.0228	1.0149	1.49%	1.2022						
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NOTE: Specs 517, 519, 817 and 818 are newly added for 2018. Specs 901 (Refrigerator #1), 904 (Air Conditioner #2), 907 (Range #1), 801 (Light Bulbs), 802 (Light Switch), 803 (Wet Mop), 804 (Floor Wax), 806 (Pushbroom), 807 (Detergent), 809 (Washers), 812 (Window Cleaner), 814 (Duplex Receptacle), and 513 (Air Conditioner Repair) were removed.

B.8 Expenditure Weights and Price Relatives, Lofts, 2018

Spec #	Itom Description	Expenditur		% Change	Spec #	Itam Description	Expenditur		% Char
	Item Description	Weight	Relative	Change	# 805	Item Description Paint	0.0509	Relative 1.0354	3.5 ⁴
01	TAXES	0.3197	1.0632	6.32%	808	Bucket	0.0096	0.9745	-2.5
O I	IAXLO	0.3197	1.0032	0.32 /8	811	Pine Disinfectant	0.0030	0.9861	-1.3
02	Payroll, Other, Union, Supts.	0.2309	1.0286	2.86%	813	Switch Plate	0.0063	0.9945	-0.5
04	Payroll, Other, Non-Union, All	0.5484	1.0508	5.08%	815	Toilet Seat	0.0214	1.0518	5.1
05	Social Security Insurance	0.0398	1.0368	3.68%	816	Deck Faucet	0.0270	1.0232	2.3
206	Unemployment Insurance	0.0044	0.8717	-12.83%	817	Large Trash Bags	0.0184	1.0027	0.2
07	Private Health & Welfare	0.1764	1.0172	1.72%	818	Smoke Detectors	0.0184	0.9526	-4.7
					902	Refrigerator #2	0.0752	1.0301	3.0
	LABOR COSTS	0.0877	1.0384	3.84%	903	Air Conditioner #1	0.0027	1.0417	4.1
					906	Dishwasher	0.0080	0.9672	-3.2
01	Fuel Oil #2	0.2960	1.1894	18.94%	908	Range #2	0.0350	0.9818	-1.8
302	Fuel Oil #4	0.5453	1.2169	21.69%					
-05	Gas #2, 65,000 therms	0.0363	1.1606	16.06%		MAINTENANCE	0.0921	1.0360	3.6
-06	Gas #3, 214,000 therms	0.0989	1.1528	15.28%					
07	Steam #1, 1.2m lbs	0.0180	1.0464	4.64%		ADMINISTRATIVE COSTS-			
-08	Steam #2, 2.6m lbs	0.0055	1.0397	3.97%		LEGAL	0.0609	1.0450	4.5
	FUEL	0.0710	1.196	19.63%	601	Management Fees	0.8353	1.0081	0.8
					602	Accountant Fees	0.1304	1.0256	2.5
01	Electricity #1, 2,500 KWH	0.0078	1.0150	1.50%	604	Newspaper Ads	0.0093	1.0126	1.2
02	Electricity #2, 15,000 KWH	0.0971	1.0152	1.52%	607	Envelopes	0.0061	1.0148	1.4
04	Gas #1, 12,000 therms	0.0029	1.1056	10.56%	608	PO Box	0.0063	1.0264	2.6
10	Water & Sewer - Frontage	0.8921	1.0000	0.00%	609	Copy Paper	0.0062	1.0060	0.6
					409	Telephone	0.0064	0.9549	-4.5
	UTILITIES	0.0664	1.0019	0.19%		A DAMINISTO ATIVE COSTS			
01	Repainting	0.2774	1.0627	6.27%		ADMINISTRATIVE COSTS- OTHER	0.0918	1.0102	1.0
02	Plumbing, Faucet	0.0868	1.0242	2.42%		OTTLETT	0.0310	1.0102	1.0
03	Plumbing, Stoppage	0.0793	1.0292	2.92%	701	INSURANCE COSTS	0.2104	1.0332	3.3
04	Elevator #1, 6 fl., 1 e.	0.0733	1.0490	4.90%	701	INCOTANGE COCTO	0.2104	1.0552	0.0
05	Elevator #2, 13 fl., 2 e.	0.0043	1.0738	7.38%					
06	Elevator #3, 19 fl., 3 e.	0.0111	1.0949	9.49%		ALL ITEMS	1.0000	1.0516	5.1
07	Burner Repair	0.0242	1.0230	2.30%		ALL ITEMO	110000	110010	٠
08	Boiler Repair, Tube	0.0296	1.0302	3.02%					
09	Boiler Repair, Weld	0.0261	1.0297	2.97%					
10	Refrigerator Repair	0.0080	1.0583	5.83%					
11	Range Repair	0.0071	1.1167	11.67%					
12	Roof Repair	0.0486	1.0377	3.77%					
14	Floor Maint. #1, Studio	0.0001	1.0320	3.20%					
15	Floor Maint. #2, 1 Br.	0.0003	1.0321	3.21%					
16	Floor Maint. #3, 2 Br.	0.0024	1.0322	3.22%					
17	Extermination	0.0272	1.0149	1.49%					
19	Electrician	0.0272	1.0052	0.52%					

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NOTE: Specs 517, 519, 817 and 818 are newly added for 2018. Specs 901 (Refrigerator #1), 904 (Air Conditioner #2), 905 (Floor Runner), 907 (Range #1), 801 (Light Bulbs), 802 (Light Switch), 803 (Wet Mop), 804 (Floor Wax), 806 (Pushbroom), 807 (Detergent), 809 (Washers), 812 (Window Cleaner), 814 (Duplex Receptacle), and 513 (Air Conditioner Repair) were removed.

Appendix C: Income and Expense Study

C.1 Average Operating & Maintenance Cost in 2016 per Apartment per Month by Building Size and Location, Structures Built Before 1947

	<u>Taxes</u>	<u>Labor</u>	<u>Fuel</u>	Water/Sewer	Light & Power	Maint.	Admin.	<u>Insurance</u>	Misc.	<u>Total</u>
Citywide	\$278	\$89	\$69	\$78	\$24	\$175	\$127	\$53	\$43	\$938
11-19 units	\$343	\$88	\$80	\$80	\$28	\$189	\$145	\$58	\$57	\$1,066
20-99 units	\$247	\$77	\$69	\$79	\$23	\$170	\$121	\$53	\$42	\$880
100+ units	\$452	\$211	\$51	\$67	\$33	\$201	\$155	\$47	\$34	\$1,251
Bronx	\$141	\$71	\$78	\$85	\$24	\$160	\$102	\$57	\$22	\$739
11-19 units	\$146	\$83	\$94	\$91	\$29	\$163	\$103	\$62	\$22	\$793
20-99 units	\$140	\$70	\$77	\$85	\$24	\$158	\$101	\$57	\$22	\$734
100+ units	\$146	\$88	\$63	\$82	\$20	\$194	\$115	\$51	\$11	\$770
Brooklyn	\$207	\$65	\$60	\$78	\$20	\$156	\$103	\$51	\$37	\$776
11-19 units	\$228	\$69	\$71	\$76	\$21	\$168	\$115	\$53	\$33	\$834
20-99 units	\$199	\$60	\$59	\$79	\$19	\$153	\$101	\$50	\$39	\$758
100+ units	\$240	\$104	\$49	\$74	\$21	\$160	\$107	\$50	\$31	\$836
Manhattan	\$463	\$130	\$70	\$75	\$31	\$210	\$180	\$55	\$70	\$1,283
11-19 units	\$508	\$109	\$83	\$85	\$35	\$224	\$199	\$65	\$88	\$1,395
20-99 units	\$409	\$101	\$70	\$75	\$27	\$203	\$170	\$54	\$71	\$1,177
100+ units	\$700	\$327	\$50	\$57	\$48	\$231	\$208	\$45	\$34	\$1,702
Queens	\$255	\$76	\$66	\$69	\$20	\$160	\$95	\$47	\$36	\$824
11-19 units	\$231	\$64	\$77	\$65	\$20	\$145	\$75	\$48	\$40	\$765
20-99 units	\$257	\$71	\$66	\$69	\$20	\$162	\$100	\$48	\$31	\$823
100+ units	\$280	\$126	\$47	\$71	\$16	\$171	\$97	\$45	\$56	\$909
Core Manhattan	\$635	\$157	\$61	\$65	\$33	\$222	\$208	\$55	\$64	\$1,500
11-19 units	\$622	\$106	\$75	\$79	\$32	\$229	\$212	\$64	\$75	\$1,495
20-99 units	\$592	\$113	\$59	\$62	\$27	\$213	\$200	\$53	\$73	\$1,391
100+ units	\$779	\$358	\$49	\$55	\$52	\$240	\$221	\$46	\$23	\$1,825
Upper Manhattan	\$263	\$98	\$79	\$85	\$28	\$196	\$148	\$54	\$76	\$1,028
11-19 units	\$278	\$115	\$97	\$95	\$40	\$213	\$172	\$65	\$113	\$1,188
20-99 units	\$260	\$91	\$78	\$85	\$26	\$194	\$145	\$54	\$70	\$1,002
100+ units	\$291	\$164	\$52	\$65	\$28	\$183	\$139	\$40	\$88	\$1,050
City w/o Core	\$201	\$75	\$70	\$80	\$23	\$165	\$110	\$53	\$39	\$816
11-19 units	\$226	\$80	\$81	\$80	\$26	\$171	\$116	\$55	\$50	\$884
20-99 units	\$195	\$71	\$70	\$81	\$22	\$164	\$109	\$53	\$37	\$802
100+ units	\$237	\$114	\$52	\$73	\$21	\$173	\$110	\$48	\$41	\$868

Notes: The sum of the lines may not equal the total due to rounding. Totals in this table may not match those in Appendix Table 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.

C.2 Average Operating & Maintenance Cost in 2016 per Apartment per Month by Building Size and Location, Structures Built After 1946

	<u>Taxes</u>	<u>Labor</u>	<u>Fuel</u>	Water/Sewer	Light & Power	Maint.	Admin.	Insurance	Misc.	<u>Total</u>
Citywide	\$348	\$167	\$51	\$68	\$36	\$186	\$155	\$44	\$53	\$1,108
11-19 units	\$197	\$96	\$57	\$64	\$40	\$173	\$123	\$50	\$55	\$855
20-99 units	\$244	\$101	\$50	\$69	\$31	\$166	\$134	\$45	\$46	\$886
100+ units	\$457	\$235	\$51	\$67	\$41	\$204	\$175	\$42	\$59	\$1,330
Bronx	\$135	\$95	\$64	\$84	\$38	\$149	\$128	\$46	\$19	\$759
11-19 units	-	-	-	-	-	-	-	-	-	-
20-99 units	\$134	\$81	\$64	\$77	\$38	\$147	\$116	\$48	\$21	\$726
100+ units	\$140	\$126	\$63	\$96	\$38	\$151	\$149	\$39	\$15	\$818
Brooklyn	\$212	\$107	\$42	\$67	\$31	\$167	\$134	\$47	\$56	\$864
11-19 units	-	-	-	-	-	-	-	-	-	-
20-99 units	\$214	\$92	\$41	\$67	\$27	\$165	\$142	\$48	\$50	\$846
100+ units	\$213	\$144	\$42	\$68	\$38	\$161	\$116	\$45	\$60	\$887
Manhattan	\$748	\$329	\$54	\$57	\$50	\$252	\$239	\$46	\$64	\$1,838
11-19 units	\$329	\$107	\$79	\$70	\$60	\$220	\$242	\$58	\$51	\$1,216
20-99 units	\$516	\$161	\$50	\$59	\$37	\$206	\$190	\$46	\$77	\$1,341
100+ units	\$813	\$377	\$54	\$56	\$53	\$264	\$251	\$46	\$60	\$1,975
Queens	\$263	\$127	\$48	\$68	\$29	\$165	\$121	\$39	\$62	\$921
11-19 units	\$210	\$109	\$52	\$57	\$42	\$142	\$99	\$45	\$37	\$792
20-99 units	\$259	\$102	\$51	\$70	\$27	\$165	\$118	\$40	\$49	\$882
100+ units	\$273	\$151	\$45	\$67	\$28	\$167	\$126	\$37	\$78	\$972
Staten Island	\$200	\$124	\$45	\$56	\$26	\$177	\$105	\$41	\$4	\$777
11-19 units	-	-	-	-	-	-	-	-	-	-
20-99 units	-	-	-	-	-	-	-	-	-	-
100+ units	-	-	-	-	-	-	-	-	-	-
Core Manhattan	\$856	\$364	\$55	\$56	\$50	\$263	\$252	\$47	\$74	\$2,017
11-19 units	\$563	\$101	\$69	\$76	\$49	\$229	\$232	\$57	\$107	\$1,483
20-99 units	\$626	\$178	\$44	\$54	\$36	\$213	\$207	\$45	\$83	\$1,485
100+ units	\$910	\$409	\$57	\$56	\$53	\$275	\$263	\$47	\$71	\$2,141
Upper Manhattan	\$294	\$181	\$48	\$61	\$49	\$201	\$179	\$43	\$21	\$1,077
11-19 units	-	-	-	-	-	-	-	-	-	-
20-99 units	\$239	\$117	\$62	\$71	\$40	\$185	\$146	\$48	\$60	\$968
100+ units	-	-	-	-	-	-	-	-	-	-
City w/o Core	\$221	\$118	\$49	\$70	\$33	\$165	\$129	\$43	\$48	\$875
11-19 units	\$192	\$96	\$56	\$64	\$40	\$172	\$121	\$50	\$54	\$846
20-99 units	\$209	\$93	\$51	\$70	\$30	\$161	\$127	\$45	\$43	\$831
100+ units	\$239	\$151	\$47	\$70	\$34	\$168	\$132	\$39	\$52	\$933

Notes: The sum of the lines may not equal the total due to rounding. Totals in this table may not match those in Appendix Table 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 and Upper Manhattan; Post-46 buildings with 20-99 units on Staten Island; 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.

C.3 Average Rent, Income and Costs in 2016 per Apartment per Month by Building Size and Location

		Post-46			Pre-47			AII	
	Rent	Income	Costs	Rent	<u>Income</u>	Costs	Rent	<u>Income</u>	Costs
Citywide	\$1,589	\$1,786	\$1,108	\$1,289	\$1,464	\$938	\$1,371	\$1,552	\$985
11-19 units	\$1,323	\$1,467	\$855	\$1,382	\$1,681	\$1,066	\$1,376	\$1,658	\$1,043
20-99 units	\$1,303	\$1,419	\$886	\$1,225	\$1,365	\$880	\$1,239	\$1,375	\$881
100+ units	\$1,869	\$2,143	\$1,330	\$1,710	\$2,008	\$1,251	\$1,819	\$2,100	\$1,305
Bronx	\$1,061	\$1,170	\$759	\$959	\$1,073	\$739	\$977	\$1,090	\$742
11-19 units	-	-	-	\$934	\$1,090	\$793	\$937	\$1,096	\$793
20-99 units	\$1,052	\$1,129	\$726	\$956	\$1,068	\$734	\$966	\$1,074	\$733
100+ units	\$1,082	\$1,241	\$818	\$1,059	\$1,164	\$770	\$1,070	\$1,200	\$793
Brooklyn	\$1,282	\$1,387	\$864	\$1,140	\$1,206	\$776	\$1,177	\$1,253	\$799
11-19 units	-	-	-	\$1,189	\$1,282	\$834	\$1,197	\$1,291	\$837
20-99 units	\$1,278	\$1,371	\$846	\$1,116	\$1,176	\$758	\$1,134	\$1,197	\$767
100+ units	\$1,255	\$1,379	\$887	\$1,279	\$1,349	\$836	\$1,264	\$1,368	\$869
Manhattan	\$2,619	\$3,082	\$1,838	\$1,714	\$2,071	\$1,283	\$1,917	\$2,298	\$1,408
11-19 units	\$1,661	\$1,976	\$1,216	\$1,714	\$2,268	\$1,395	\$1,714	\$2,265	\$1,394
20-99 units	\$1,933	\$2,264	\$1,341	\$1,622	\$1,894	\$1,177	\$1,647	\$1,924	\$1,191
100+ units	\$2,809	\$3,307	\$1,975	\$2,222	\$2,756	\$1,702	\$2,599	\$3,110	\$1,877
Queens	\$1,323	\$1,426	\$921	\$1,240	\$1,302	\$824	\$1,282	\$1,365	\$873
11-19 units	\$1,308	\$1,436	\$792	\$1,127	\$1,189	\$765	\$1,148	\$1,218	\$768
20-99 units	\$1,284	\$1,374	\$882	\$1,248	\$1,307	\$823	\$1,258	\$1,325	\$839
100+ units	\$1,358	\$1,469	\$972	\$1,351	\$1,433	\$909	\$1,356	\$1,460	\$957
Staten Island 11-19 units 20-99 units 100+ units	\$1,023 - - -	\$1,190 - - -	\$777 - - -	- - -	- - -	- - -	\$1,044 - \$1,031 -	\$1,186 - \$1,092 -	\$772 - \$716 -
Core Manhattan	\$2,859	\$3,373	\$2,017	\$2,033	\$2,512	\$1,500	\$2,282	\$2,772	\$1,656
11-19 units	\$1,852	\$2,408	\$1,483	\$1,835	\$2,503	\$1,495	\$1,836	\$2,501	\$1,494
20-99 units	\$2,155	\$2,522	\$1,485	\$1,991	\$2,355	\$1,391	\$2,003	\$2,367	\$1,398
100+ units	\$3,025	\$3,572	\$2,141	\$2,383	\$2,981	\$1,825	\$2,781	\$3,348	\$2,021
Upper Manhattan	\$1,596	\$1,843	\$1,077	\$1,339	\$1,552	\$1,028	\$1,366	\$1,583	\$1,033
11-19 units	-	-	-	\$1,463	\$1,779	\$1,188	\$1,464	\$1,774	\$1,182
20-99 units	\$1,357	\$1,595	\$968	\$1,318	\$1,516	\$1,002	\$1,320	\$1,519	\$1,002
100+ units	-	-	-	\$1,367	\$1,561	\$1,050	\$1,486	\$1,701	\$1,077
City w/o Core	\$1,264	\$1,379	\$875	\$1,154	\$1,237	\$802	\$1,184	\$1,275	\$821
11-19 units	\$1,315	\$1,454	\$846	\$1,135	\$1,220	\$793	\$1,161	\$1,255	\$801
20-99 units	\$1,225	\$1,318	\$831	\$1,127	\$1,205	\$782	\$1,146	\$1,226	\$792
100+ units	\$1,305	\$1,445	\$933	\$1,279	\$1,371	\$874	\$1,297	\$1,424	\$916

Notes: City, borough totals and building size categories are weighted. 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, and Upper Manhattan; Post-46 buildings with 20-99 units on Staten Island; 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.

C.4 Median Rent, Income and Costs in 2016 per Apartment per Month by Building Size and Location

		Post-46			Pre-47			All	
	Rent	Income	Costs	Rent	<u>Income</u>	Costs	Rent	Income	<u>Costs</u>
Citywide	\$1,270	\$1,365	\$892	\$1,169	\$1,262	\$841	\$1,182	\$1,280	\$847
11-19 units	\$1,231	\$1,465	\$840	\$1,282	\$1,480	\$983	\$1,281	\$1,480	\$975
20-99 units	\$1,207	\$1,282	\$822	\$1,134	\$1,214	\$808	\$1,142	\$1,222	\$809
100+ units	\$1,387	\$1,520	\$1,050	\$1,298	\$1,390	\$884	\$1,359	\$1,478	\$998
Bronx	\$1,049	\$1,111	\$700	\$957	\$1,046	\$716	\$966	\$1,053	\$714
11-19 units	-	-	-	\$913	\$1,050	\$755	\$916	\$1,055	\$752
20-99 units	\$1,047	\$1,092	\$699	\$958	\$1,042	\$710	\$966	\$1,048	\$709
100+ units	\$1,068	\$1,190	\$709	\$1,053	\$1,180	\$762	\$1,057	\$1,185	\$755
Brooklyn	\$1,213	\$1,292	\$811	\$1,093	\$1,139	\$737	\$1,105	\$1,153	\$744
11-19 units	-	-	-	\$1,111	\$1,173	\$767	\$1,111	\$1,179	\$772
20-99 units	\$1,209	\$1,273	\$793	\$1,084	\$1,127	\$728	\$1,094	\$1,139	\$733
100+ units	\$1,217	\$1,323	\$868	\$1,231	\$1,305	\$808	\$1,219	\$1,310	\$829
Manhattan	\$2,208	\$2,564	\$1,506	\$1,595	\$1,853	\$1,135	\$1,627	\$1,893	\$1,159
11-19 units	\$1,628	\$1,951	\$1,211	\$1,653	\$2,071	\$1,280	\$1,652	\$2,066	\$1,278
20-99 units	\$1,941	\$2,138	\$1,218	\$1,541	\$1,731	\$1,063	\$1,561	\$1,757	\$1,072
100+ units	\$2,853	\$3,258	\$1,890	\$2,037	\$2,456	\$1,537	\$2,571	\$2,939	\$1,745
Queens	\$1,296	\$1,375	\$901	\$1,215	\$1,244	\$766	\$1,236	\$1,285	\$802
11-19 units	\$1,227	\$1,343	\$727	\$1,133	\$1,157	\$727	\$1,135	\$1,174	\$727
20-99 units	\$1,263	\$1,332	\$857	\$1,236	\$1,272	\$781	\$1,242	\$1,291	\$799
100+ units	\$1,352	\$1,445	\$980	\$1,324	\$1,388	\$884	\$1,336	\$1,437	\$954
Staten Island 11-19 units 20-99 units 100+ units	\$1,000 - - -	\$1,130 - - -	\$706 - - -	- - -	- - -	- - -	\$1,046 - \$1,022 -	\$1,141 - \$1,060 -	\$693 - \$654 -
Core Manhattan	\$2,479	\$2,856	\$1,662	\$1,844	\$2,178	\$1,288	\$1,882	\$2,217	\$1,316
11-19 units	\$1,628	\$2,040	\$1,366	\$1,748	\$2,219	\$1,348	\$1,747	\$2,217	\$1,348
20-99 units	\$2,096	\$2,214	\$1,336	\$1,896	\$2,112	\$1,227	\$1,907	\$2,130	\$1,232
100+ units	\$3,038	\$3,414	\$1,981	\$2,364	\$2,830	\$1,736	\$2,779	\$3,250	\$1,906
Upper Manhattan	\$1,476	\$1,570	\$917	\$1,206	\$1,372	\$904	\$1,215	\$1,379	\$906
11-19 units	-	-	-	\$1,236	\$1,518	\$1,026	\$1,239	\$1,518	\$1,020
20-99 units	\$1,310	\$1,411	\$825	\$1,196	\$1,345	\$885	\$1,199	\$1,352	\$884
100+ units	-	-	-	\$1,198	\$1,355	\$876	\$1,354	\$1,505	\$977
City w/o Core	\$1,202	\$1,280	\$814	\$1,072	\$1,150	\$762	\$1,089	\$1,166	\$768
11-19 units	\$1,166	\$1,338	\$763	\$1,095	\$1,182	\$793	\$1,100	\$1,188	\$792
20-99 units	\$1,158	\$1,222	\$784	\$1,064	\$1,139	\$753	\$1,075	\$1,149	\$757
100+ units	\$1,276	\$1,369	\$932	\$1,193	\$1,262	\$814	\$1,240	\$1,332	\$871

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 and Upper Manhattan; Post-46 buildings with 20-99 units on Staten Island; 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.

C.5 Average Net Operating Income in 2016 per Apartment per Month by Building Size and Location

	Post-46	Pre-47	<u>All</u>
Citywide	\$678	\$526	\$568
11-19 units	\$612	\$615	\$615
20-99 units	\$533	\$485	\$493
100+ units	\$814	\$756	\$796
Bronx	\$411	\$334	\$348
11-19 units	-	\$297	\$303
20-99 units	\$403	\$334	\$341
100+ units	\$423	\$394	\$407
Brooklyn	\$523	\$430	\$454
11-19 units	-	\$448	\$454
20-99 units	\$525	\$418	\$430
100+ units	\$492	\$513	\$499
Manhattan	\$1,244	\$788	\$890
11-19 units	\$761	\$872	\$871
20-99 units	\$923	\$717	\$734
100+ units	\$1,333	\$1,054	\$1,233
Queens	\$504	\$479	\$492
11-19 units	\$644	\$424	\$450
20-99 units	\$492	\$484	\$486
100+ units	\$497	\$524	\$503
Staten Island 11-19 units 20-99 units 100+ units	\$412 - - -	- - -	\$414 - \$376 -

	Post-46	Pre-47	<u>All</u>
Core Manhattan	\$1,356	\$1,012	\$1,116
11-19 units	\$925	\$1,008	\$1,007
20-99 units	\$1,037	\$964	\$969
100+ units	\$1,431	\$1,156	\$1,327
Upper Manhattan	\$766	\$524	\$550
11-19 units	-	\$591	\$592
20-99 units	\$627	\$514	\$517
100+ units	-	\$511	\$624
City w/o Core	\$504	\$435	\$454
11-19 units	\$608	\$427	\$454
20-99 units	\$486	\$422	\$434
100+ units	\$512	\$497	\$508

Notes: City, borough totals and building size categories are weighted. 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 and Upper Manhattan; Post-46 buildings with 20-99 units on Staten Island; 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.

C.6 Distribution of Operating Costs in 2016, by Building Size and Age

	<u>Taxes</u>	Maint.	Labor	Admin.	<u>Utilities</u>	<u>Fuel</u>	Misc.	<u>Insurance</u>	<u>Total</u>
Pre-47	29.6%	18.7%	9.5%	13.6%	10.9%	7.4%	4.6%	5.7%	100.0%
11-19 units	32.1%	17.7%	8.2%	13.6%	10.1%	7.5%	5.4%	5.5%	100.0%
20-99 units	28.1%	19.3%	8.7%	13.8%	11.5%	7.8%	4.7%	6.0%	100.0%
100+ units	36.1%	16.0%	16.9%	12.4%	8.0%	4.1%	2.7%	3.8%	100.0%
Post-46	31.4%	16.8%	15.1%	14.0%	9.4%	4.6%	4.8%	4.0%	100.0%
11-19 units	23.0%	20.2%	11.2%	14.3%	12.2%	6.6%	6.4%	5.9%	100.0%
20-99 units	27.5%	18.7%	11.3%	15.1%	11.3%	5.7%	5.2%	5.1%	100.0%
100+ units	34.3%	15.3%	17.7%	13.2%	8.1%	3.8%	4.4%	3.2%	100.0%
All Bidgs.	30.2%	18.1%	11.2%	13.7%	10.4%	6.5%	4.7%	5.2%	100.0%
11-19 units	31.3%	18.0%	8.5%	13.7%	10.3%	7.4%	5.5%	5.5%	100.0%
20-99 units	28.0%	19.2%	9.2%	14.0%	11.5%	7.4%	4.8%	5.9%	100.0%
100+ units	34.9%	15.5%	17.4%	12.9%	8.0%	3.9%	3.9%	3.4%	100.0%

C.7 Number of "Distressed" Buildings in 2016

	<u>Citywide</u>	Bronx	Brooklyn	Manhattan	Queens	Staten Island	Core Manh	Upper Manh
Pre-47 11-19 units 20-99 units 100+ units All	263 406 11 680	41 98 3 142	47 65 1 113	148 205 6 359	27 37 1 65	0 1 0 1	91 97 3 191	57 108 3 168
Post-46 11-19 units 20-99 units 100+ units All	11 43 15 69	4 12 3 19	2 7 1 10	4 9 7 20	1 14 4 19	0 1 0 1	2 6 7 15	2 3 0 5
All Bldgs. 11-19 units 20-99 units 100+ units All	274 449 26 749	45 110 6 161	49 72 2 123	152 214 13 379	28 51 5 84	0 2 0 2	93 103 10 206	59 111 3 173

Source: NYC Department of Finance, RPIE Filings.

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

C.8 Operating Cost-to-Income Ratios by Decile in 2016

	# of Bldgs	<u>10%</u>	<u>20%</u>	<u>30%</u>	<u>40%</u>	<u>50%</u>	<u>60%</u>	<u>70%</u>	<u>80%</u>	90%	<u>100%</u>
Citywide	15,389	0.48	0.53	0.57	0.60	0.64	0.68	0.72	0.78	0.89	5.82
Manhattan	6,350	0.46	0.51	0.54	0.57	0.61	0.65	0.70	0.77	0.90	5.82
Bronx	3,370	0.52	0.57	0.61	0.65	0.68	0.72	0.76	0.82	0.91	1.89
Brooklyn	3,589	0.49	0.54	0.57	0.61	0.64	0.68	0.71	0.77	0.86	2.77
Queens	2,000	0.48	0.53	0.56	0.59	0.63	0.66	0.70	0.76	0.85	2.21
Staten Island	80	0.48	0.53	0.57	0.61	0.64	0.68	0.74	0.77	0.80	1.19

C.9 Number of Buildings and Dwelling Units in 2016 by Building Size and Location

	Pos		Pre-		Al	
	Bldgs.	<u>DUs</u>	Bldgs.	<u>DUs</u>	<u>Bldgs.</u>	<u>DUs</u>
Citywide 11-19 units 20-99 units 100+ units	1,954 151 1,170 633	204,896 2,220 66,952 135,724	13,434 3,602 9,444 388	500,192 54,592 376,030 69,570	15,389 3,753 10,615 1,021	705,122 56,812 443,016 205,294
Bronx	384	30,033	2,986	129,372	3,370	159,405
11-19 units	17	267	363	5,520	380	5,787
20-99 units	296	17,476	2,542	112,598	2,838	130,074
100+ units	71	12,290	81	11,254	152	23,544
Brooklyn	420	40,419	3,169	114,671	3,589	155,090
11-19 units	28	414	890	13,389	918	13,803
20-99 units	270	16,553	2,210	93,131	2,480	109,684
100+ units	122	23,452	69	8,151	191	31,603
Manhattan	482	70,025	5,867	199,704	6,350	269,763
11-19 units	50	746	1,965	29,741	2,015	30,487
20-99 units	209	10,675	3,732	129,810	3,942	140,519
100+ units	223	58,604	170	40,153	393	98,757
Queens	612	60,021	1,388	55,109	2,000	115,130
11-19 units	50	708	376	5,816	426	6,524
20-99 units	361	20,891	949	40,025	1,310	60,916
100+ units	201	38,422	63	9,268	264	47,690
Staten Island	56	4,398	24	1,336	80	5,734
11-19 units	6	85	8	126	14	211
20-99 units	34	1,357	11	466	45	1,823
100+ units	16	2,956	5	744	21	3,700
Core Manhattan	389	59,694	3,637	119,120	4,026	178,814
11-19 units	36	552	1,479	22,443	1,515	22,995
20-99 units	157	8,075	2,038	63,836	2,195	71,911
100+ units	196	51,067	120	32,841	316	83,908
Upper Manhattan	93	10,331	2,230	80,584	2,324	90,949
11-19 units	14	194	486	7,298	500	7,492
20-99 units	52	2,600	1,694	65,974	1,747	68,608
100+ units	27	7,537	50	7,312	77	14,849

Source: NYC Department of Finance, RPIE Filings.

DU = Dwelling Unit

C.10 Longitudinal Income and Expense Study, Estimated Average Rent, Income and Costs Changes (2015-2016) by Building Size and Location

		Post-46			Pre-47			All	
	Rent	Income	Costs	<u>Rent</u>	Income	<u>Costs</u>	Rent	Income	Costs
Citywide	2.8%	2.6%	2.9%	3.2%	3.3%	2.1%	3.1%	3.1%	2.4%
11-19 units	4.3%	3.6%	8.4%	3.5%	3.6%	2.5%	3.6%	3.6%	3.0%
20-99 units	2.8%	2.7%	2.7%	3.2%	3.3%	1.7%	3.1%	3.2%	1.9%
100+ units	2.8%	2.5%	2.7%	2.5%	3.1%	3.8%	2.7%	2.7%	3.1%
Bronx	-0.4%	-0.1%	0.4%	2.0%	2.0%	-0.4%	1.5%	1.6%	-0.2%
11-19 units	-	-	-	2.7%	2.3%	-1.4%	2.7%	2.2%	-0.8%
20-99 units	0.3%	0.6%	-1.2%	1.9%	1.9%	-0.4%	1.7%	1.7%	-0.5%
100+ units	-1.7%	-1.4%	3.0%	2.9%	3.2%	1.6%	-0.1%	0.1%	2.5%
Brooklyn	4.4%	4.0%	4.9%	4.0%	3.9%	3.5%	4.1%	3.9%	3.9%
11-19 units	-	-	-	4.1%	4.2%	3.2%	3.9%	3.9%	4.7%
20-99 units	4.5%	4.0%	4.8%	3.9%	3.8%	3.1%	4.1%	3.9%	3.6%
100+ units	4.6%	4.4%	3.0%	4.4%	4.0%	7.6%	4.5%	4.2%	4.8%
Manhattan	2.4%	2.3%	3.2%	3.0%	3.4%	2.5%	2.8%	3.1%	2.7%
11-19 units	4.3%	3.9%	-1.0%	3.2%	3.4%	2.9%	3.2%	3.4%	2.9%
20-99 units	0.8%	1.1%	2.2%	3.3%	3.6%	2.2%	3.1%	3.4%	2.2%
100+ units	2.7%	2.5%	3.4%	1.7%	2.8%	3.2%	2.4%	2.6%	3.4%
Queens 11-19 units 20-99 units 100+ units	3.7% 5.7% 3.6% 3.6%	3.4% 5.4% 3.6% 3.1%	2.2% 4.1% 3.2% 1.2%	4.1% 4.3% 4.2% 3.6%	4.2% 4.5% 4.4% 3.3%	3.0% 1.9% 3.0% 4.1%	3.9% 4.7% 3.9% 3.6%	3.8% 4.8% 4.1% 3.1%	2.5% 2.5% 3.1% 1.7%
Staten Island 11-19 units 20-99 units 100+ units	2.9%	1.3% - - -	1.4% - - -	- - -	- - -	- - -	3.3% - 3.5% -	2.0% - 3.6% -	2.8% - 7.3% -
Core Manhattan	2.3%	2.1%	3.8%	2.9%	3.4%	3.6%	2.7%	2.9%	3.7%
11-19 units	3.5%	2.4%	2.9%	3.3%	3.7%	3.8%	3.3%	3.7%	3.8%
20-99 units	0.0%	0.2%	2.7%	3.3%	3.5%	3.7%	2.8%	3.0%	3.6%
100+ units	2.6%	2.4%	3.9%	1.7%	2.8%	3.2%	2.3%	2.5%	3.7%
Upper Manhattan	3.5%	3.6%	-1.1%	3.2%	3.5%	0.7%	3.3%	3.5%	0.5%
11-19 units	-	-	-	2.8%	2.6%	0.6%	2.8%	2.7%	0.5%
20-99 units	4.4%	5.0%	0.1%	3.4%	3.8%	0.5%	3.4%	3.8%	0.5%
100+ units	-	-	-	2.3%	2.8%	3.7%	2.8%	2.9%	0.2%
All City w/o Core	3.2%	2.9%	2.4%	3.3%	3.3%	1.5%	3.2%	3.2%	1.8%
11-19 units	4.3%	3.7%	8.5%	3.6%	3.6%	1.6%	3.8%	3.6%	2.5%
20-99 units	3.2%	3.2%	2.7%	3.2%	3.2%	1.2%	3.2%	3.2%	1.5%
100+ units	2.9%	2.5%	1.4%	3.6%	3.5%	4.8%	3.1%	2.8%	2.3%

Notes: City, borough totals and building size categories are weighted. 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 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.

C.11 Longitudinal Income and Expense Study, Estimated Median Rent, Income and Costs Changes (2015-2016) by Building Size and Location

		Post-46			Pre-47			All	
	Rent	Income	Costs	Rent	<u>Income</u>	Costs	Rent	Income	<u>Costs</u>
Citywide	3.9%	3.1%	3.7%	3.8%	3.5%	1.4%	3.7%	3.7%	1.4%
11-19 units	2.7%	7.0%	-0.5%	4.4%	4.5%	2.6%	4.4%	4.4%	2.9%
20-99 units	3.1%	3.8%	2.8%	3.8%	3.6%	1.8%	3.8%	3.4%	1.9%
100+ units	3.4%	4.2%	3.3%	3.9%	3.3%	2.6%	3.7%	3.4%	3.5%
Bronx	2.4%	3.7%	1.4%	2.5%	2.9%	0.7%	2.7%	2.9%	0.7%
11-19 units	-	-	-	3.0%	1.9%	0.1%	2.3%	2.0%	-0.1%
20-99 units	2.7%	3.3%	1.1%	2.4%	2.8%	0.8%	2.7%	2.9%	0.7%
100+ units	-0.3%	2.1%	1.3%	2.2%	3.0%	2.8%	1.9%	2.9%	3.3%
Brooklyn	5.7%	5.4%	5.2%	4.5%	3.5%	3.5%	4.4%	3.7%	3.8%
11-19 units	-	-	-	3.9%	3.4%	1.8%	3.8%	3.3%	2.0%
20-99 units	5.4%	4.9%	6.3%	4.5%	4.0%	3.6%	4.4%	3.6%	3.8%
100+ units	5.4%	4.1%	3.2%	5.2%	4.7%	16.9%	5.1%	5.0%	4.4%
Manhattan	4.4%	3.0%	1.7%	3.2%	3.4%	2.0%	3.2%	3.3%	2.5%
11-19 units	0.9%	-0.4%	0.7%	3.6%	2.2%	2.3%	3.5%	2.3%	2.1%
20-99 units	3.3%	3.1%	5.6%	2.8%	3.7%	0.8%	2.7%	3.2%	0.9%
100+ units	2.1%	2.4%	5.7%	4.1%	4.1%	3.6%	1.0%	3.2%	4.8%
Queens	4.6%	2.8%	4.1%	4.0%	3.6%	1.3%	3.4%	3.9%	1.6%
11-19 units	3.2%	2.9%	1.7%	3.4%	3.0%	1.7%	2.8%	3.7%	1.7%
20-99 units	3.2%	3.6%	2.8%	3.0%	3.8%	2.4%	3.0%	4.1%	2.4%
100+ units	3.8%	3.6%	4.0%	2.2%	3.8%	5.0%	3.8%	3.1%	5.9%
Staten Island 11-19 units 20-99 units 100+ units	1.5% - - -	2.2% - - -	2.6%	- - -	- - -	- - - -	1.9% - 1.5% -	1.1% - 3.2% -	1.5% - -0.3% -
Core Manhattan	3.3%	3.0%	3.3%	3.5%	3.2%	3.0%	3.7%	2.9%	3.5%
11-19 units	-5.6%	-2.3%	2.8%	3.3%	3.0%	3.1%	3.2%	2.9%	3.2%
20-99 units	3.4%	1.7%	4.2%	4.2%	3.2%	2.8%	4.2%	3.2%	3.3%
100+ units	2.7%	2.3%	4.5%	1.1%	2.7%	4.8%	1.4%	2.7%	4.7%
Upper Manhattan	4.4%	4.8%	-0.6%	3.7%	4.0%	-0.2%	3.4%	3.6%	-0.2%
11-19 units	-	-	-	2.5%	5.8%	-2.9%	2.7%	5.8%	-2.6%
20-99 units	4.3%	3.7%	12.6%	3.5%	4.9%	-0.2%	3.6%	4.7%	-0.1%
100+ units	-	-	-	4.8%	4.2%	-3.7%	3.8%	4.7%	1.6%
All City w/o Core	3.6%	3.6%	2.2%	3.6%	3.5%	1.7%	3.6%	3.5%	1.9%
11-19 units	4.1%	5.1%	9.8%	3.8%	3.8%	0.9%	3.8%	3.8%	1.1%
20-99 units	3.3%	2.8%	3.0%	3.6%	3.5%	1.9%	3.6%	3.5%	2.2%
100+ units	3.5%	2.7%	6.3%	4.2%	3.9%	5.1%	3.5%	3.2%	4.6%

Notes: Cost figures in this table are NOT adjusted for the results of the 1992 NYC Department of Finance audit on I&E reported operating costs. The number of Post-46 rent stabilized buildings with 11-19 units in the Bronx, Brooklyn, Staten Island 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.

C.12 Longitudinal Income and Expense Study, Avg. Net Operating Income Changes (2015-2016) by Bldg. Size & Location

	Post-46	<u>Pre-47</u>	All
Citywide	2.1%	5.5%	4.4%
11-19 units	-2.3%	5.7%	4.7%
20-99 units	2.7%	6.2%	5.5%
100+ units	2.0%	1.9%	2.0%
Bronx	-1.1%	7.6%	5.7%
11-19 units	-	13.3%	10.9%
20-99 units	4.1%	7.4%	6.9%
100+ units	-9.1%	6.3%	-4.2%
Brooklyn	2.4%	4.6%	4.0%
11-19 units	-	6.3%	2.4%
20-99 units	2.7%	5.0%	4.4%
100+ units	7.2%	-1.4%	3.2%
Manhattan	0.9%	5.0%	3.7%
11-19 units	13.5%	4.3%	4.4%
20-99 units	-0.5%	6.0%	5.4%
100+ units	1.1%	2.1%	1.4%
Queens	5.9%	6.5%	6.2%
11-19 units	7.1%	9.4%	8.6%
20-99 units	4.4%	6.8%	5.9%
100+ units	6.9%	1.9%	5.9%
Staten Island 11-19 units 20-99 units 100+ units	1.2% - - -	- - -	0.5% - -2.9% -

	<u>Post-46</u>	<u>Pre-47</u>	<u>All</u>
Core Manhattan	-0.3%	3.1%	1.8%
11-19 units	1.7%	3.6%	3.6%
20-99 units	-3.4%	3.2%	2.3%
100+ units	0.2%	2.2%	0.8%
Upper Manhattan	11.6%	9.8%	10.0%
11-19 units	-	6.9%	7.3%
20-99 units	13.3%	10.8%	10.9%
100+ units	-	1.0%	7.8%
All City w/o Core	3.8%	6.9%	6.0%
11-19 units	-2.4%	7.7%	5.7%
20-99 units	4.0%	7.3%	6.6%
100+ units	4.7%	1.2%	3.7%

Notes: City, borough totals and building size categories are weighted. 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 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.

C.13 Longitudinal Income and Expense Study, Change in Rent and Net Operating Income by Community District (2015-2016)

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	3.1% 3.7% 2.8% 3.3% 3.9% 2.5% 3.1% 4.1% 2.2% 1.2% 3.5%	1.1% 4.6% 5.0% 0.8% 3.1% 0.8% 3.2% 19.4% 0.2% 3.6% 14.9%
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	0.8% 2.8% 1.4% 2.7% 2.0% 4.0% 1.5% 2.1% 1.8% -0.8% 1.2% -0.6%	-3.3% 7.0% 17.6% 6.5% 7.6% 15.4% 5.7% 6.9% 7.7% 2.8% 8.1% -1.9%
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	4.1% 3.6% 6.3% -2.5% 4.4% 4.6% 4.9% 4.5% 2.7% 4.0% 3.6% 5.0% 3.9% 3.5% 4.6% 3.9% 9.1%	3.9% 2.5% 6.7% -3.6% 6.2% 7.9% 6.9% 3.3% 0.5% 1.9% 5.3% 8.1% 7.4% 5.5% 10.7% 2.8% 6.9%
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% 4.5% 5.3% 3.8% 4.2% 3.4% 3.3% 6.2% 3.5% 7.1% 3.3% 3.8%	6.3% 7.1% 11.9% 5.7% 2.8% 1.5% 6.1% 11.9% 4.8% 20.9% 5.4% 8.3%
Staten Island 501	North Shore	3.3%	-0.5%

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

C.14 Longitudinal Analysis, Number of Buildings and Dwelling Units in 2015 & 2016, by Building Size and Location

	Pos	t-46	Pre-	17	А	II
	Bldgs.	<u>DUs</u>	Bldgs.	<u>DUs</u>	Bldgs.	<u>DUs</u>
Citywide	1,753	187,191	12,242	463,806	13,995	650,997 50,126 408,803 192,068
11-19 units	127	1,877	3,178	48,249	3,305	
20-99 units	1,040	59,659	8,695	349,144	9,735	
100+ units	586	125,655	369	66,413	955	
Bronx	328	26,262	2,647	117,092	2,975	143,354
11-19 units	13	206	291	4,480	304	4,686
20-99 units	252	14,927	2,278	101,855	2,530	116,782
100+ units	63	11,129	78	10,757	141	21,886
Brooklyn	369	35,976	2,864	106,191	3,233	142,167
11-19 units	22	329	754	11,360	776	11,689
20-99 units	237	14,609	2,046	87,204	2,283	101,813
100+ units	110	21,038	64	7,627	174	28,665
Manhattan	434	64,388	5,406	186,715	5,840	251,103
11-19 units	46	689	1,787	27,055	1,833	27,744
20-99 units	182	9,255	3,457	121,268	3,639	130,523
100+ units	206	54,444	162	38,392	368	92,836
Queens	570	56,526	1,305	52,584	1,875	109,110
11-19 units	40	568	339	5,244	379	5,812
20-99 units	337	19,557	906	38,447	1,243	58,004
100+ units	193	36,401	60	8,893	253	45,294
Staten Island	52	4,039	20	1,224	72	5,263
11-19 units	6	85	7	110	13	195
20-99 units	32	1,311	8	370	40	1,681
100+ units	14	2,643	5	744	19	3,387
Core Manhattan	356	55,843	3,390	112,097	3,746	167,940
11-19 units	35	540	1,367	20,730	1,402	21,270
20-99 units	139	7,024	1,910	60,159	2,049	67,183
100+ units	182	48,279	113	31,208	295	79,487
Upper Manhattan	78	8,545	2,016	74,618	2,094	83,163
11-19 units	11	149	420	6,325	431	6,474
20-99 units	43	2,231	1,547	61,109	1,590	63,340
100+ units	24	6,165	49	7,184	73	13,349

Source: NYC Department of Finance, RPIE Filings.

DU = Dwelling Unit

Appendix D: Mortgage Survey Report

D.1 Mortgage Interest Rates and Terms, 2018

Lending Institution	Rate (%)	<u>Points</u>	Term (yrs)	<u>Type</u>	New <u>Volume</u>	Refin <u>Volume</u>
5	NR	0.75	Ω	both	10	10
17	6.00%	1.00	5 + 5 yrs	NR	50	5
28	4.50%	0.00	NR	both	50	50
30	4.75%	0.25	110-210 BPS	both	4	79
35	3.75%	0.00	5/5/5 based on amort	adj	28	12
37	5.85%	1.00	10 yrs	fixed	0	4
107	4.19%	0.00	5, 7 and 10 yrs	fixed	250	301
117	3.75%	0.00	Ω	fixed	67	150
209	5.00%	1.00	5 year CMT + 2.5%	fixed	2	0
301	4.13%	0.25	Ω	fixed	8	2
401	5.69%	0.00	Ω	fixed	41	9
402	5.50%	1.00	10 year	adj	10	10
AVERAGE	4.83%	0.44	t	t	43	53

Adj adjustable rate mortgage † No average computed NR no response BPS Basis Points CMT Constant Maturity Treasury

 Ω #5 = 1.75-2.25% over swaps #117 = 5 years; 1.50 over swaps #301 = 5 yr-1.30 bps; 7 yr-1.40 bps; 10 yr-1.50 bps #401 = 30-40 years; commitment fee: 75 bps

Note: Averages for interest rates and points are calculated by using the midpoint when a range of values is given by the lending institution.

Source: 2018 NYC Rent Guidelines Board Mortgage Survey

D.2 Typical Lending Portfolio Characteristics of Rent Stabilized Buildings, 2018

Lending Institution	Maximum Loan-to-Value <u>Standard</u>	Debt Service <u>Coverage</u>	Vacancy & Collection Losses	Typical Building <u>Size</u>	Average Monthly O&M <u>Cost/Unit</u>	Average Monthly Rent/Unit
5	75%	1.20	2%	50-99	\$700	\$1,500
17	75%	1.20	5%	20-49	\$475	\$1,106
28	80%	1.25	2%	50-99	NR	\$1,750
30	80%	1.20	5%	11-19	\$585	NR
35	65%	1.25	3%	1-10	\$400	\$1,075
37	65%	1.20	3%	1-10	\$682	\$1,188
107	80%	1.20	0.5%	50-99	NR	NR
117	75%	1.25	4%	50-99	\$725	\$1,200
209	75%	1.25	3%	50-99	NR	NR
301	60%	7.5% DY	3%	50-99	NR	NR
401	83%	NR	3%	100+	\$620	\$1,230
402	70%	1.25	0.5%	1-10	NR	\$1,200
			0.000/		A-00	~ ~~
AVERAGE	73.5%	1.23	2.83%	†	\$598	\$1,281

NR no response DY Debt Yield † No average computed.

Notes: Average loan-to-value (LTV) and debt service coverage ratios are calculated using the midpoint when a range was given by the lending institution. Debt Yield refers to Net Operating Income (NOI) divided by the first mortgage debt (loan) amount, times 100.

Source: 2018 NYC Rent Guidelines Board Mortgage Survey

D.3 Interest Rates and Terms for New Financing, Longitudinal Study, 2017-2018

	Interes	t Rates	Po	oints	Tern	n	Ty	уре
Lending Inst.	<u>2018</u>	2017	<u>2018</u>	2017	<u>2018</u>	2017	<u>2018</u>	<u>2017</u>
5 17 28 30 35 37 107 117 209 301	NR 6.00% 4.50% 4.75% 3.75% 5.85% 4.19% 3.75% 5.00% 4.13%	4.00% NR 4.00% 4.00% 4.75% 5.75% 3.75% 3.00% 4.50% 4.00%	0.75 1.00 0.00 0.25 0.00 1.00 0.00 0.00 1.00 0.25	0.50 NR 0.00 1.25 0.00 1.00 0.00 0.00 1.00 0.50	Ω 5 + 5 yrs NR 110-210 BPS 5/5/5 based on amort 10 yrs 5, 7 and 10 yrs Ω 5 year CMT + 2.5% Ω	• NR NR • NR 10 yrs • • • • 175	both NR both both adj fixed fixed fixed fixed fixed fixed	fixed NR both both fixed fixed adj fixed fixed fixed
401 402 AVERAGE	5.69% 5.50% 4.83%	5.25% 5.00% 4.36%	0.00 1.00	0.00 1.00 0.48	Ω 10 year	30-35 yrs NR	fixed adj	fixed adj

NR no response † No average computed Adj = adjustable rate mortgage BPS Basis Points

Note: Averages for interest rates and points are calculated by using the midpoint when a range of values is given by the lending institution.

Source: 2017 and 2018 NYC Rent Guidelines Board Mortgage Surveys

D.4 Lending Standards and Vacancy & Collection Losses, Longitudinal Study, 2017-2018

	Max Loar	n-to-Value	Debt Service Coverage		V&C Lo	osses
Lending Inst.	<u>2018</u>	2017	<u>2018</u>	2017	<u>2018</u>	<u>2017</u>
5 17	75%	75%	1.20	7.5% DY	2%	3%
28	75%	80%	1.20	1.25	5%	5%
	80%	80%	1.25	1.25	2%	3%
30	80%	80%	1.20	1.20	5%	3%
35	65%	65%	1.25	1.25	3%	4%
37	65%	65%	1.20	1.20	3%	3%
107	80%	75%	1.20	1.20	0.5%	0.5%
117	75%	75%	1.25	1.25	4%	4%
209	75%	70%	1.25	1.30	3%	4%
301	60%	65%	7.5% DY	8% DY	3%	2%
401	83%	83%	NR	115	3%	3%
402	70%	70%	1.25	1.15	0.5%	3%
AVERAGE	73.5%	73.5%	1.23	1.22	2.83%	3.13%

NR no response DY Debt Yield

Notes: Average loan-to-value and debt service coverage ratios are calculated using the midpoint when a range is given by the lending institution. Debt Yield refers to Net Operating Income (NOI) divided by the first mortgage debt (loan) amount, times 100.

Source: 2017 and 2018 NYC Rent Guidelines Board Mortgage Surveys

 $[\]Omega$ #5 = 1.75-2.25% over swaps #117 = 5 years; 1.50 over swaps #301 = 5 yr-1.30 bps; 7 yr-1.40 bps; 10 yr-1.50 bps #401 = 30-40 years; commitment fee: 75 bps

^{◆ #5 = 5-10} yr, 2-2.5% over swaps #30 = Adjustable: 4.6 4.65 4.7 / Fixed 4.5 4.6 4.65 #107 = 5, 7 year product #117 = 5 yr: spread over swap rates 3.625 note commitment fee amt; 7 yr: 3.875; 10 yr: 4.25 #209 = 275 bps over 5 yr US Treasury

Appendix D: Mortgage Survey Report

D.5 Retrospective of New York City's Housing Market, 1982-2018

<u>Year</u>	Interest Rates for New Mortgages	Permits for ew Housing Units in and northern subu	Permits for w Housing Units in NYC only
1982	16.3%	11,598 b	7,649
1983	13.0%	17,249 b	11,795
1984	13.5%	15,961	11,566
1985	12.9%	25,504	20,332
1986	10.5%	15,298	9,782
1987	10.2%	18,659	13,764
1988	10.8%	13,486	9,897
1989	12.0%	13,896	11,546
1990	11.2%	9,076	6,858
1991	10.7%	6,406	4,699
1992	10.1%	5,694	3,882
1993	9.2%	7,314	5,173
1994	8.6%	6,553	4,010
1995	10.1%	7,296	5,135
1996	8.6%	11,457	8,652
1997	8.8%	11,619	8,987
1998	8.5%	13,532	10,387
1999	7.8%	15,326	12,421
2000	8.7%	18,077	15,050
2001	8.4%	19,636	16,856
2002	7.4%	21,423	18,500
2003	6.2%	23,778	21,218
2004	5.8%	27,695	25,208
2005	5.5%	33,606	31,599
2006	6.3%	32,609	30,927
2007	6.3%	34,514	31,902
2008	6.1%	34,715	33,911
2009	6.5%	6,665	6,057
2010	6.3%	7,406	6,727
2011	5.8%	10,326	8,936
2012	4.6%	11,170	10,334
2013	4.4%	18,963	17,995
2014	4.9%	21,580	20,428
2015	4.3%	57,559	56,183
2016	4.0%	18,116 ◆	16,280 ◆
2017	4.3%	24,054 Ø	22,131 Ø
2018	4.8%	*	*

b Prior to 1984, Bergen Co., NJ permit figures are included.

Notes: Interest rate data was collected in January-February and represents a 12-month average of the preceding year. Permit data is for the entire 12-month period of the shown year. The northern suburbs include Putnam, Rockland, and Westchester counties. Sources: NYC Rent Guidelines Board, Annual Mortgage Surveys; U.S. Bureau of the Census, Manufacturing & Construction Division, Residential Construction Branch.

Ø Figures are preliminary.

[◆] This figure has been revised from the preliminary figure reported last year to reflect the final adjusted count.

^{*}Permit data for 2018 will be available in next year's Mortgage Survey Report.

D.6 2018 Survey of Mortgage Financing for Multifamily Properties

I. Financing Availability and To	101 TIU	Bullulliga
Do you currently offer new permanent financing (i.e., loans secured by a property not previously	Interest rate :	(current) % (2017 average
mortgaged by your institution) for rent stabilized buildings?	Points :	
☐ Yes (Indicate typical terms and conditions at right.) ☐ No	Terms:	Current 5, 7 and 10 yr spreads over swap rates and note commitmen fee amount:
	Туре:	Fixed / Adjustable (circle one)
	Special condition	ons:
How many loans were made by your institution in 2017 for new permanent financing of rent stabilized buildings?	Number of loa	ns:
How many loans did your institution refinance in 2017 for rent stabilized buildings?	Number of loa	ns:
a. In the past year, has the total volume of new and refinanced loans underwritten by your institution changed significantly (by at least 5%)?	Yes, we have	e experienced a significant %. rease)
		out the same. (Please skip Question 3b).
b. If loan volume has changed significantly, is the change attributable to:	☐ A significant	in the volume of
(Please check and fill in all applicable choices.)	☐ A significant	
	application	approvals of about %.
are there any trends related to financing availability and terms	on which you wish	to comment?

	Approximately what percentage of your loans to rent stabilized buildings are currently in foreclosure?	☐ None ☐ Approximately	%.
IIa.	Does your institution retain the mortgages you offer or do you sell any to secondary markets?	to question 12.) We sell all our mort	ortgages sold. (If so, please skip gages to secondary markets. ur mortgages to secondary market
I I b.	. To whom do you sell your mortgages ? (Please check all that apply)	□ Fannie Mae □ Freddie Mac □ Other:	
12.	In your sector, who are your major competitors in mult	i-family lending?	
13.	Do the mortgages offered to rent stabilized buildings	□ No	
	include any commercial space?		what percentage of buildings in nmercial space?%
14.	What is your best estimate of average operating and maintenance costs per unit per month in the rent stabilized buildings financed by your institution?	\$	_ per unit per month
	ude the following operating and maintenance costs in your es ices, Administration — including Legal, Management and other co		
15.	What is your best estimate of average rent per unit per month in the rent stabilized buildings financed by your institution?	\$	_ per unit per month
16.	Do any of your lending or underwriting standards differ for rent stabilized buildings as opposed to non-stabilized multifamily properties? (Please check all that apply)	New Financing Rates: Refinancing Rates: LTV Ratio: Debt Service Coverage:	□ Higher □ Lower □ Same
17.	On average, how does your portfolio of rent stabilized buildings perform as compared with expectations at the time of the initial loan originations? (Please check all that apply)		Better Worse Same Better Worse Same Better Some

II. Underwriting Criteria f	or Rent Stabilized Buildings			
4a. What standards does your institution employ when assessing loan applications for rent stabilized	Maximum LTV:			
buildings?	Minimum DSCR or Debt Yield:			
Please provide any other standards your institution employs when assessing loan applications.	N ₄			
If you do not employ the standard given, place an "X" in the "N.A." column.	Number of Units in Building:			
(Indicate an average, minimum, or maximum criteria.)	Building Age:			
(morate on dverage, minimum, or maximum circuit.)	Borrower Lives in Building:			
	Overall Building Maintenance:			
	Co-op / Condo Conversion Potential:			
	Other (Please Specify):			
5. Did your institution change its underwriting practices for financing or refinancing rent	☐ Yes.			
stabilized buildings over the past year?	☐ No. (If no, please skip to Question 7).			
Yes, we changed our underwriting practices for rent stabilized buildings to:	Use stringent approvals.			
(Please check and fill in all applicable choices.)	Require fees (i.e., points or fees).			
	(Increase / Decrease)			
	(Increase / Decrease) monitoring requirements.			
	lending to rent stabili			
	(Discontinue / Reduce / Expand) buildings.			
III. Additional Mo	ortgage Questions			
7. How many dwelling units are contained in the average rent stabilized building financed by your institution? (Please check only one.)	□ 1-10 □ 11-19 □ 20-49 □ 50-99 □ 100 or more			
8. Which of the following best describes the average	□ < 1% □ 1% □ 2%			
vacancy and collection loss for rent stabilized buildings during the past year? (Please check only one.)	□ 3% □ 4% □ 5% □ 6% □ 7% □ > 7%			
Approximately what percentage of your loans to rent stabilized buildings are currently non-performing?	□ None □ Approximately%.			
performing.	- · · · · · · · · · · · · · · · · · · ·			
	1			

18.	Please estimate the average mortgage loan payment per unit per month for a typical building in your portfolions.	o:
19.	Are there any additional trends relating to underwriting criteria, non-performing loans & foreclosure, or the mortg market in general on which you wish to comment?	age
-		
l _		_
cor	ank you for taking the time to complete the survey. If you have any questions, please stact RGB Research Director Brian Hoberman at (212) 669-7484 or oberman@nycrgb.org.	
	dings will be published in the 2018 Mortgage Survey Report, which is scheduled to be eased by the end of March.	
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Appendix D: Mortgage Survey Report

D.7 Rent Stabilized Building Sales Volume, Citywide and by Borough, and Percent Change, 2006-2017

	<u>2006</u>	2007	2008	2009	<u>2010</u>	<u>2011</u>	<u>2012</u>	2013	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
Citywide* % Change from Prior Yr	1,433	1,474	1,021	521	541	709	1,135	1,431	1,356	1,361	1,167	793
	-	2.9%	<i>-30.7%</i>	-49.0%	<i>3.8%</i>	<i>31.1%</i>	<i>60.1%</i>	<i>26.1%</i>	<i>-5.2%</i>	<i>0.4%</i>	-14.3%	-32.0%
Bronx % Change from Prior Yr	224	319	171	100	131	130	204	245	302	262	234	156
	-	<i>42.4%</i>	-46.4%	-41.5%	<i>31.0</i> %	-0.8%	56.9%	20.1%	<i>23.3%</i>	-13.2%	-10.7%	<i>-33.3%</i>
Brooklyn	593	520	426	199	185	258	396	472	494	499	378	292
% Change from Prior Yr	-	-12.3%	-18.1%	<i>-53.3%</i>	-7.0%	<i>39.5%</i>	<i>53.5%</i>	19.2%	4.7%	1.0%	<i>-24.2%</i>	<i>-22.8%</i>
Manhattan	403	470	243	146	144	225	419	466	393	438	407	233
% Change from Prior Yr		16.6%	-48.3%	<i>-39.9%</i>	-1.4%	56.3%	<i>86.2%</i>	11.2%	-15.7%	11.5%	-7.1%	-42.8%
Queens % Change from Prior Yr	213	165	181	76	81	96	116	248	167	162	148	112
	-	<i>-22.5%</i>	<i>9.7%</i>	-58.0%	<i>6.6%</i>	18.5%	20.8%	113.8%	<i>-32.7%</i>	<i>-3.0%</i>	-8.6%	<i>-24.3%</i>

^{*}Note: Staten Island buildings are excluded due to the small number of rent stabilized buildings sold.

Source: NYC Department of Finance

D.8 Rent Stabilized Building Median Sales Price and Sales Volume, by Borough and Building Size, and Percent Change in Sales, 2016-2017

	2016 Median Sale Price	2017 Median Sale Price	2016 # of Sales	2017 # of Sales	Change in Sales from 2016-17
Citywide All buildings* 6-10 units 11-19 units 20-99 units 100+ units	\$4,500,000	\$3,800,000	1,167	793	-32.0%
	\$1,748,205	\$1,585,392	458	374	-18.3%
	\$3,831,250	\$3,675,000	192	122	-36.5%
	\$8,250,000	\$9,000,000	475	281	-40.8%
	\$41,862,500	\$35,000,000	42	16	-61.9%
Bronx All buildings* 6-10 units 11-19 units 20-99 units	\$3,562,500	\$4,215,500	234	156	-33.3%
	\$1,050,000	\$1,190,000	59	41	-30.5%
	\$2,152,274	\$2,645,000	40	31	-22.5%
	\$5,497,559	\$5,887,500	130	81	-37.7%
Brooklyn All buildings* 6-10 units 11-19 units 20-99 units	\$2,600,000	\$2,100,000	378	292	-22.8%
	\$1,800,000	\$1,575,000	233	199	-14.6%
	\$3,500,000	\$3,275,000	48	38	-20.8%
	\$8,400,000	\$7,500,000	94	51	-45.7%
Manhattan All buildings* 6-10 units 11-19 units 20-99 units	\$8,000,000 \$5,050,000 \$6,270,000 \$9,850,000	\$8,300,000 \$5,525,000 \$7,595,000 \$12,000,000	407 86 89 205	233 64 45 118	-42.8% -25.6% -49.4% -42.4%
Queens All buildings* 6-10 units 11-19 units 20-99 units	\$2,150,000	\$1,725,000	148	112	-24.3%
	\$1,350,000	\$1,450,000	80	70	-12.5%
	-	-	-	-	-
	\$11,813,642	\$11,546,512	46	31	-32.6%

Note: All Staten Island buildings; Queens 11-19 unit buildings; and all 100+ unit buildings in individual boroughs, are excluded due to the small number of buildings sold.

Source: NYC Department of Finance

^{* &}quot;All buildings" totals include buildings with 100 or more units. Therefore, these figures may not equal the sum of their subsets. In addition, Citywide figures do not contain Staten Island building sales.

E.1 Average Annual Employment Statistics by Area, 2006-2017

Unemployment Rate	2006	2007	2008	2009	<u>2010</u>	2011	2012	2013	<u>2014</u>	<u>2015</u>	<u>2016</u>	2017
Bronx Brooklyn Manhattan Queens Staten Island	6.7% 5.4% 4.3% 4.5% 4.5%	6.8% 5.4% 4.3% 4.5% 4.6%	7.6% 6.0% 4.9% 5.0% 5.1%	12.0% 9.9% 8.4% 8.4% 8.2%	12.0% 9.9% 8.6% 8.6% 9.4%	11.9% 9.6% 7.8% 8.1% 9.2%	12.4% 9.8% 8.0% 8.3% 9.5%	11.8% 9.4% 7.5% 7.7% 9.0%	9.8% 7.6% 6.1% 6.4% 7.4%	7.8% 5.9% 4.9% 5.0% 5.8%	7.1% 5.3% 4.5% 4.5% 5.2%	6.2% 4.6% 4.0% 4.0% 4.6%
NYC	5.0%	5.0%	5.6%	9.3%	9.5%	9.1%	9.3%	8.8%	7.2%	5.7%	5.2%	4.5%
U.S.	4.6%	4.6%	5.8%	9.3%	9.6%	8.9%	8.1%	7.4%	6.2%	5.3%	4.9%	4.4%
Labor Force Participation Rate NYC Δ U.S.	59.0% 66.2%	59.1% 66.0%	59.7% 66.0%	59.9% 65.4%	60.0% 64.7%	59.7% 64.1%	59.9% 63.7%	60.2% 63.2%	60.4% 62.9%	60.3% 62.7%	60.6% 62.8%	60.9% 62.9%
Employment-Population Ratio NYC Δ U.S.	56.1% 63.1%	56.1% 63.0%	56.4% 62.2%	54.4% 59.3%	54.3% 58.5%	54.2% 58.4%	54.3% 58.6%	54.9% 58.6%	56.0% 59.0%	56.9% 59.3%	57.5% 59.7%	58.1% 60.1%
Gross City Product (NYC) Billions, in 2009 \$ % Change	596.2 4.24%	616.1 3.34%	607.1 -1.45%	595.0 -2.00%	617.3 3.75%	629.6 1.99%	648.8 3.05%	670.4 3.32%	692.1 3.25%	719.0 3.88%	737.0 2.51%	754.7 2.40%
Gross Domestic Product (U.S.) Billions, in 2009 \$ % Change	14,613.8 2.67%	14,873.7 1.78%	14,830.4 -0.29%	14,418.7 -2.78%	14,783.8 2.53%	15,020.6 1.60%	15,354.6 2.22%	15,612.2 1.68%	16,013.3 2.57%	16,471.5 2.86%	16,716.2 1.49%	17,092.5 2.25%

Notes: The NYC Comptroller's Office revises the Gross City Product periodically. The GCP & GDP figures presented here may not be the same as those reported in prior years. Note that GCP and GDP figures are preliminary. The NYS Department of Labor also periodically revises unemployment rates, and rates reflected here might not match those figures reported in prior years.

Sources: U.S. Bureau of Labor Statistics; U.S. Bureau of Economic Analysis, NYS Department of Labor; NYC Comptroller's Office.

Δ Unpublished data from the Bureau of Labor Statistics. These figures are revised periodically.

E.2 Average Payroll Employment by Industry for NYC, 2008-2017 (in thousands)

Total	3,811.8	3,711.7	3,730.5	3,818.1	3,904.6	3,998.9	4,130.1	4,255.8	4,345.7	4,426.7	1.9%
City of New York	458.5	462.1	451.4	451.7	450.0	450.1	452.9	457.2	458.9	458.7	0.0%
Government ‡	564.1	567.0	558.0	550.6	546.1	544.4	545.4	549.9	552.3	552.1	0.0%
Total Private Sector	3,247.7	3,144.7	3,172.5	3,267.5	3,358.5	3,454.5	3,584.7	3,705.9	3,793.5	3,874.7	2.1%
Other Services	160.8	160.3	160.6	165.2	170.4	174.9	180.2	185.7	190.1	191.5	0.7%
Educational & Health Svcs.	736.3	752.6	771.6	789.2	805.6	831.1	866.4	896.9	928.7	963.4	3.7%
Professional & Business Svcs		569.2	575.3	597.5	619.3	642.9	669.0	700.0	722.3	742.3	2.8%
Information	169.5	165.2	165.9	170.8	175.7	179.2	185.0	189.0	192.6	197.1	2.3%
Financial Activities	464.6	433.9	428.3	439.1	438.8	437.5	449.2	459.3	465.9	469.8	0.8%
Leisure & Hospitality	310.2	308.5	322.2	342.2	365.7	385.4	408.5	427.8	440.2	452.1	2.7%
Trade, Transport & Utilities	574.6	552.7	559.7	575.6	590.5	605.0	620.6	630.2	630.4	634.3	0.6%
Resources & Mining	132.7	120.8	112.5	112.3	116.1	122.2	129.2	139.3	147.2	151.1	2.6%
Manufacturing Construction, Natural	95.6	81.6	76.3	75.7	76.3	76.4	76.6	77.8	76.1	73.1	-3.9%
											2 22/
Industry Employment	2008	2009	2010	2011	2012	2013	2014	<u>2015</u>	2016	2017	2016-2017 Change

Notes: Totals may not add up due to rounding. Figures may have been revised from prior years by the NYS Department of Labor. Total excludes farm employment but includes unclassified jobs.

Source: NYS Department of Labor

[‡] Government includes federal, state, and local (City of New York) jobs located in NYC. Local government figures have been revised from prior years to include those employed by the City of New York as well as city-based public corporations such as the Health and Hospitals Corporation and the Metropolitan Transportation Authority.

E.3 Average Real Wage Rates by Industry for NYC, 2009-2017 (2017 dollars)

Industry	2009	<u>2010</u>	<u>2011</u>	2012	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	2016-17 % Change
Construction	\$77,884	\$78,253	\$77,736	\$75,808	\$75,659	\$75,423	\$76,985	\$80,272	\$80,119	-0.2%
Manufacturing	\$58,767	\$58,144	\$59,028	\$55,989	\$53,907	\$55,178	\$57,032	\$59,081	\$59,889	1.4%
Transportation	\$52,984	\$53,527	\$53,612	\$52,773	\$52,702	\$55,285	\$54,341	\$57,002	\$57,520	0.9%
Trade*	\$52,891	\$52,627	\$53,558	\$53,155	\$54,321	\$53,451	\$54,130	\$55,825	\$55,605	-0.4%
Finance and Insurance	\$258,307	\$291,959	\$294,397	\$267,017	\$284,172	\$300,168	\$300,346	\$286,649	\$294,750	2.8%
Real Estate	\$66,480	\$66,640	\$68,181	\$68,549	\$70,463	\$72,541	\$76,533	\$78,992	\$80,711	2.2%
Admin/Waste/Edu/Health**	\$53,544	\$54,013	\$53,557	\$52,766	\$52,826	\$52,923	\$54,184	\$55,426	\$54,495	-1.7%
Arts, Entertainment & Rec	\$69,686	\$71,440	\$70,961	\$67,182	\$65,692	\$66,813	\$70,861	\$73,344	\$72,143	-1.6%
Accomm & Food Svcs.	\$31,556	\$31,724	\$31,838	\$31,544	\$31,420	\$31,992	\$32,456	\$33,978	\$34,391	1.2%
Other Svcs.	\$48,023	\$49,449	\$48,952	\$45,993	\$45,629	\$46,087	\$47,369	\$49,178	\$49,728	1.1%
Professional & Tech Svcs.	\$119,567	\$119,597	\$123,478	\$120,701	\$121,148	\$123,624	\$127,104	\$129,537	\$129,481	0.0%
Management of Companies	\$176,040	\$203,607	\$208,672	\$198,057	\$196,796	\$197,569	\$196,543	\$187,461	\$180,311	-3.8%
Information	\$115,307	\$118,214	\$120,407	\$121,358	\$126,090	\$131,734	\$136,037	\$139,392	\$138,101	-0.9%
Utilities	\$101,452	\$106,205	\$107,882	\$118,857	∆	∆	\$115,334	\$119,519	\$121,346	1.5%
Unclassified/Agri/Mining***	\$38,477	\$43,179	\$43,996	\$42,139	\$41,764	\$44,201	\$42,659	\$44,534	\$45,212	1.5%
Private Sector	\$87,373	\$90,638	\$91,568	\$87,181	\$88,340	\$90,117	\$91,315	\$91,245	\$91,119	-0.1%
Government	\$62,882	\$63,299	\$63,693	\$62,150	\$61,613	\$62,668	\$64,699	\$65,679	\$66,310	1.0%
Total Industries	\$83,630	\$86,437	\$87,479	\$83,615	\$84,609	\$86,405	\$87,800	\$87,925	\$87,955	0.0%

Note: Each year refers to the first three quarters of that year, and the fourth quarter of the prior year. The New York State Department of Labor revises the statistics annually. Real wages reflect 2017 dollars and differ from those found in this table in prior years.

Δ Wages for the this industry were not reported by the NYS Department of Labor during this time period due to the small number of respondents, and corresponding privacy concerns.

Source: New York State Department of Labor, Research and Statistics Division.

^{*}The Wholesale Trade and Retail Trade sectors have been combined into one category. **The Administrative and Waste Service, Educational Services, and Health Care and Social Assistance Service have been combined into one category. ***The Unclassified; Agriculture, Forestry, Fishing Hunting; and Mining sectors have been combined into one category.

E.4 Average Nominal Wage Rates by Industry for NYC, 2009-2017

Industry	2009	<u>2010</u>	<u>2011</u>	2012	2013	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	2016-17 <u>% Change</u>
Construction	\$68,738	\$70,232	\$71,478	\$71,262	\$72,436	\$73,247	\$74,900	\$78,731	\$80,119	1.8%
Manufacturing	\$51,866	\$52,184	\$54,277	\$52,631	\$51,611	\$53,586	\$55,488	\$57,947	\$59,889	3.4%
Transportation	\$46,762	\$48,040	\$49,296	\$49,608	\$50,457	\$53,691	\$52,870	\$55,908	\$57,520	2.9%
Trade*	\$46,680	\$47,232	\$49,247	\$49,967	\$52,007	\$51,909	\$52,665	\$54,754	\$55,605	1.6%
Finance and Insurance	\$227,972	\$262,032	\$270,698	\$251,002	\$272,067	\$291,510	\$292,213	\$281,146	\$294,750	4.8%
Real Estate	\$58,673	\$59,809	\$62,692	\$64,438	\$67,462	\$70,449	\$74,461	\$77,476	\$80,711	4.2%
Admin/Waste/Edu/Health**	\$47,256	\$48,476	\$49,246	\$49,601	\$50,575	\$51,397	\$52,717	\$54,362	\$54,495	0.2%
Arts, Entertainment & Rec	\$61,502	\$64,117	\$65,249	\$63,153	\$62,894	\$64,886	\$68,942	\$71,936	\$72,143	0.3%
Accomm & Food Svcs.	\$27,850	\$28,472	\$29,275	\$29,652	\$30,082	\$31,069	\$31,577	\$33,326	\$34,391	3.2%
Other Svcs.	\$42,383	\$44,380	\$45,012	\$43,235	\$43,685	\$44,757	\$46,086	\$48,234	\$49,728	3.1%
Professional & Tech Svcs.	\$105,526	\$107,338	\$113,538	\$113,462	\$115,987	\$120,058	\$123,662	\$127,050	\$129,481	1.9%
Management of Companies	\$155,367	\$182,736	\$191,873	\$186,178	\$188,413	\$191,870	\$191,221	\$183,862	\$180,311	-1.9%
Information	\$101,766	\$106,097	\$110,714	\$114,080	\$120,719	\$127,934	\$132,353	\$136,716	\$138,101	1.0%
Utilities	\$89,538	\$95,318	\$99,197	\$111,728	∆	∆	\$112,211	\$117,225	\$121,346	3.5%
Unclassified/Agri/Mining***	\$33,959	\$38,753	\$40,454	\$39,612	\$39,985	\$42,926	\$41,504	\$43,679	\$45,212	3.5%
Private Sector	\$77,112	\$81,347	\$84,196	\$81,952	\$84,577	\$87,517	\$88,842	\$89,493	\$91,119	1.8%
Government	\$55,497	\$56,811	\$58,566	\$58,423	\$58,989	\$60,860	\$62,947	\$64,419	\$66,310	2.9%
Total Industries	\$73,809	\$77,577	\$80,437	\$78,600	\$81,005	\$83,913	\$85,422	\$86,237	\$87,955	2.0%

Note: Each year refers to the first three quarters of that year, and the fourth quarter of the prior year. The NYS Department of Labor revises the statistics annually.

Δ Wages for the this industry were not reported by the NYS Department of Labor during this time period due to the small number of respondents, and corresponding privacy concerns.

Source: New York State Department of Labor, Research and Statistics Division.

^{*}The Wholesale Trade and Retail Trade sectors have been combined into one category. **The Administrative and Waste Service, Educational Services, and Health Care and Social Assistance Service have been combined into one category. ***The Unclassified; Agriculture, Forestry, Fishing Hunting; and Mining sectors have been combined into one category.

E.5 Consumer Price Index for All Urban Consumers, NY-Northeastern NJ, 2007-2017

	2007	2008	2009	<u>2010</u>	<u>2011</u>	2012	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	2017
March June September December	224.6 228.3 228.3 229.4	233.1 238.6 240.1 233.0	235.1 237.2 238.6 238.4	240.1 240.8 241.5 241.9	245.6 248.5 250.6 248.3	251.9 252.4 254.6 253.6	256.6 256.9 258.5 257.3	260.0 261.4 261.1 258.1	259.6 261.5 261.9 259.9	261.5 263.9 264.6 265.4	267.6 268.7 270.1 269.6
Quarterly Average Yearly Average	227.6 226.9	236.2 235.8	237.3 236.8	241.1 240.9	248.2 247.7	253.1 252.6	257.3 256.8	260.1 260.2	260.7 260.6	263.9 263.4	269.0 268.5
12-month percentage change in the CPI											
	2007	2008	2009	<u>2010</u>	2011	2012	2013	2014	<u>2015</u>	<u>2016</u>	2017
March June September December	2.91% 2.54% 2.43% 3.66%	3.82% 4.52% 5.16% 1.58%	0.83% -0.59% -0.63% 2.32%	2.14% 1.54% 1.22% 1.45%	2.30% 3.19% 3.76% 2.66%	2.55% 1.57% 1.59% 2.11%	1.87% 1.78% 1.55% 1.47%	1.32% 1.73% 0.99% 0.31%	-0.12% 0.06% 0.31% 0.72%	0.72% 0.90% 1.04% 2.11%	2.32% 1.81% 2.06% 1.56%

Source: U.S. Bureau of Labor Statistics; Base Period: 1982-1984=100

E.6 Housing Court Actions, 1984-2017

			Evictions &	I			Evictions &
<u>Year</u>	<u>Filings</u>	<u>Calendared</u>	<u>Possessions</u>	<u>Year</u>	<u>Filings</u>	<u>Calendared</u>	<u>Possessions</u>
1984	343,000	85,000	23,058	2001	277,440	130,897	21,369*
1985	335,000	82,000	20,283	2002	331,309	132,148	23,697
1986	312,000	81,000	23,318	2003	318,077	133,074	23,236
1987	301,000	77,000	25,761	2004	261,085	121,999	22,010
1988	299,000	92,000	24,230	2005	261,457	119,265	21,945
1989	299,000	99,000	25,188	2006	256,747	122,379	23,491
1990	297,000	101,000	23,578	2007	251,390	121,793	24,171
1991	302,000	114,000	20,432	2008	246,147	120,420	24,600
1992	289,000	122,000	22,098	2009	251,871	123,149	26,449
1993	295,000	124,000	21,937	2010	213,066**	127,396	25,655
1994	294,000	123,000	23,970	2011	221,182	126,315	27,636
1995	266,000	112,000	22,806	2012	217,914	132,860	28,743
1996	278,000	113,000	24,370	2013	215,497	122,463	28,849
1997	274,000	111,000	24,995	2014	208,158	127,334	26,857
1998	278,156	127,851	23,454	2015	203,119	111,409	21,988
1999	276,142	123,399	22,676	2016	202,300	105,431	22,089
2000	276,159	125,787	23,830	2017	201,441	114,879	21,074
				1		-	

Note: "Filings" reflect non-payment proceedings initiated by rental property owners, while "Calendared" reflect those non-payment proceedings resulting in a court appearance. "Filings" and "Calendared" figures prior to 1998 were rounded to the nearest thousand.

Sources: NYC Civil Court, First Deputy Chief Clerk for Housing; NYC Department of Investigations, Bureau of City Marshals.

^{*}Note: 2001 Evictions and Possessions data is incomplete as it excludes the work of one city marshal who died in May 2001 and whose statistics are unavailable.

^{**}Due to an administrative change at NYCHA relating to their handling of late rent payments, the number of non-payment filings decreased dramatically. If not for this change, the drop in non-payment filings between 2009 and 2010 would have been significantly less, or nonexistent.

E.7 Homeless Statistics, 1982-2017

Year	Single Adults	Children	Families (inc. children)	Total Individuals
1982	3,786	2,507	1,005	7,584
1983	5,061	4,887	1,960	12,468
1984	6,228	7,432	2,981	17,491
1985	7,217	9,196	3,688	21,154
1986	8,890	10,493	4,286	24,896
1987	9,628	11,163	4,986	27,225
1988	9,675	11,401	5,091	27,646
1989	9,342	8,614	4,105	23,254
1990	8,535	6,966	3,591	20,131
1991	7,689	8,867	4,581	22,498
1992	6,922	9,607	5,270	23,494
1993	6,413	9,760	5,626	23,748
1994	6,235	9,610	5,629	23,431
1995	6,532	9,927	5,627	23,950
1996	7,020	9,945	5,692	24,554
1997	7,090	8,437	4,793	22,145
1998	6,875	8,054	4,558	21,277
1999	6,778	8,826	4,965	22,575
2000	6,934	9,290	5,192	23,712
2001	7,479	11,427	6,154	27,799
2002	7,750	14,952	8,071	34,576
2003	8,199	16,705	9,203	38,310
2004	8,612	15,705	8,922	37,319
2005	8,174	13,534	8,194	33,687
2006	7,662	12,597	8,339	32,430
2007	6,942	14,060	9,075	34,109
2008	6,530	14,327	8,856	33,554
2009	6,764	15,326	9,719	35,915
2010	7,825	14,788	9,635	36,175
2011	8,543	15,501	9,573	37,765
2012	9,047	18,068	10,705	43,295
2013	9,862	21,163	12,062	49,408
2014	10,591	23,511	13,317	54,122
2015	12,014	23,658	14,037	57,158
2016	13,148	23,199	14,953	58,770
2017	14,074	22,733	14,384	59,467

Note: Data presented are the annual averages of the Department of Homeless Services shelter population. Street homelessness is not quantified in this data.

Source: NYC Department of Homeless Services

E.8 Poverty Rates, 2006-2016

	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
U.S.	13.3%	13.0%	13.2%	14.3%	15.3%	15.9%	15.9%	15.8%	15.5%	14.7%	14.0%
New York City	19.2%	18.5%	18.2%	18.7%	20.1%	20.9%	21.2%	20.9%	20.9%	20.0%	18.9%
Bronx	29.1%	27.1%	27.6%	28.5%	30.2%	30.4%	31.0%	30.9%	31.6%	30.4%	28.7%
Brooklyn	22.6%	21.9%	21.1%	21.8%	23.0%	23.6%	24.3%	23.3%	23.4%	22.3%	20.6%
Manhattan	18.3%	17.6%	16.9%	16.6%	16.4%	18.3%	17.8%	18.9%	17.6%	17.6%	17.3%
Queens	12.2%	12.0%	12.1%	12.6%	15.0%	15.8%	16.2%	15.3%	15.2%	13.8%	13.2%
Staten Island	9.2%	9.8%	10.0%	11.2%	11.8%	11.7%	11.6%	12.8%	14.5%	14.4%	13.2%

Source: 2006-2016 American Community Survey

F.1 Permits Issued For Housing Units in New York City, 1962-2018

1962 1963 1964 1965 1966 1967 1968 1969	70,686 49,898 20,594 25,715 23,142 22,174 22,062 17,031 22,365 32,254 36,061 22,417 15,743 3,810
1963 1964 1965 1966 1967 1968	49,898 20,594 25,715 23,142 22,174 22,062 17,031 22,365 32,254 36,061 22,417 15,743 3,810
1964 1965 1966 1967 1968	20,594 25,715 23,142 22,174 22,062 17,031 22,365 32,254 36,061 22,417 15,743 3,810
1965 1966 1967 1968	25,715 23,142 22,174 22,062 17,031 22,365 32,254 36,061 22,417 15,743 3,810
1966 1967 1968	23,142 22,174 22,062 17,031 22,365 32,254 36,061 22,417 15,743 3,810
1967 1968	22,174 22,062 17,031 22,365 32,254 36,061 22,417 15,743 3,810
1968	22,062 17,031 22,365 32,254 36,061 22,417 15,743 3,810
	17,031 22,365 32,254 36,061 22,417 15,743 3,810
1909	22,365 32,254 36,061 22,417 15,743 3,810
1070	32,254 36,061 22,417 15,743 3,810
1970	36,061 22,417 15,743 3,810
1971	22,417 15,743 3,810
1972	15,743 3,810
1973	3,810
1974	
1975	E 40E
1976	5,435
1977	7,639
1978	11,096
1979	14,524
1980	7,800
1981	11,060
1982	7,649
1983	11,795
1984	11,566
1985 1,263 1,068 12,079 2,211 3,711	20,332
1986 920 1,278 1,622 2,180 3,782	9,782
1987 931 1,650 3,811 3,182 4,190	13,764
1988 967 1,629 2,460 2,506 2,335	9,897
1989 1,643 1,775 2,986 2,339 2,803	11,546
1990 1,182 1,634 2,398 704 940	6,858
1991 1,093 1,024 756 602 1,224	4,699
1992 1,257 646 373 351 1,255	3,882
1993 1,293 1,015 1,150 530 1,185	5,173
1994 846 911 428 560 1,265	4,010
1995 853 943 1,129 738 1,472	5,135
1996 885 942 3,369 1,301 2,155	8,652
1997 1,161 1,063 3,762 1,144 1,857	8,987
1998 1,309 1,787 3,823 1,446 2,022	10,387
1999 1,153 2,894 3,791 2,169 2,414	12,421
2000 1,646 2,904 5,110 2,723 2,667	15,050
2001 2,216 2,973 6,109 3,264 2,294	16,856
2002 2,626 5,247 5,407 3,464 1,756	18,500
2003 2,935 6,054 5,232 4,399 2,598	21,218
2004 4,924 6,825 4,555 6,853 2,051	25,208
2005 4,937 9,028 8,493 7,269 1,872	31,599
2006 4,658 9,191 8,790 7,252 1,036	30,927
2007 3,088 10,930 9,520 7,625 739	31,902
2008 2,482 12,744 9,700 7,730 1,255	33,911
2009 1,647 1,003 1,363 1,474 570	6,057
2010 1,064 2,093 704 2,358 508	6,727
2011 1,116 1,522 2,535 3,182 581	8,936
2012 2,552 3,353 2,328 1,428 673	10,334
2013 2,638 6,140 4,856 3,161 1,200	17,995
2014 1,885 7,551 5,435 4,900 712	20,483
2015 4,682 26,026 12,612 12,667 541	56,528
2016 4,003 4,503 4,024 2,838 901	16,269
2017 5,401 6,130 4,811 5,104 685	22,131
2018 (1st Qtr) $^{\Omega}$ 1,181 (1,124) 1,737 (2,097) 1,326 (1,486) 794 (1,434) 132 (202)	5,170 (6,343)

 Ω First three months of 2018. The number of permits issued in the first three months of 2017 is in parenthesis.

Source: U.S. Bureau of the Census, Manufacturing and Construction Division, Building Permits Branch.

F.2 Permits Issued by Building Size & Borough (In Percentages), 2009-2017

Year/Borough	1-Family	2-Family	3/4 Family	5 or More-Family	Total Buildings
2009 Bronx Brooklyn Manhattan Queens Staten Island <i>Citywide</i>	38.1% 0.8% 0.0% 29.7% 48.0% 31.2%	14.4% 28.2% 0.0% 43.3% 49.8% 37.1%	20.6% 38.9% 11.8% 16.0% 0.0% 15.3%	26.9% 32.1% 88.2% 11.0% 2.2% 16.5%	160 131 34 418 271 1,014
2010 Bronx Brooklyn Manhattan Queens Staten Island Citywide	9.2% 3.6% 0.0% 12.4% 71.9% 30.3%	38.5% 31.4% 18.2% 67.2% 27.2% 47.3%	23.1% 27.9% 9.1% 11.2% 0.6% 10.6%	29.2% 37.1% 72.7% 9.2% 0.3% 11.8%	65 140 11 509 349 1,074
2011 Bronx Brooklyn Manhattan Queens Staten Island Citywide	1.5% 0.0% 3.6% 21.5% 52.5% 26.5%	35.3% 44.3% 0.0% 57.0% 47.2% 48.3%	19.1% 30.5% 3.6% 11.9% 0.0% 11.3%	44.1% 25.3% 92.9% 9.6% 0.3% 13.8%	68 174 28 386 341 <i>997</i>
2012 Bronx Brooklyn Manhattan Queens Staten Island Citywide	5.9% 0.4% 9.5% 26.8% 64.1% 27.8%	39.3% 20.5% 4.8% 41.9% 34.6% <i>32.5%</i>	17.0% 36.9% 0.0% 16.9% 0.0% 16.2%	37.8% 42.2% 85.7% 14.4% 1.3% 23.5%	135 249 42 284 298 1,008
2013 Bronx Brooklyn Manhattan Queens Staten Island Citywide	2.4% 0.0% 1.6% 39.3% 55.9% 29.1%	41.6% 19.8% 7.8% 32.6% 42.5% 32.0%	12.0% 31.6% 0.0% 13.3% 0.2% 13.3%	44.0% 48.6% 90.6% 14.8% 1.4% 25.7%	125 364 64 399 431 1,383
2014 Bronx Brooklyn Manhattan Queens Staten Island Citywide	0.0% 0.0% 1.3% 47.8% 68.1% 35.8%	33.3% 19.3% 9.0% 25.4% 31.1% 25.3%	20.4% 25.8% 2.6% 10.5% 0.2% 11.6%	46.3% 55.0% 87.2% 16.3% 0.6% 27.4%	108 400 78 448 479 1,513
2015 Bronx Brooklyn Manhattan Queens Staten Island Citywide	2.9% 5.3% 3.8% 31.0% 63.0% 23.5%	26.3% 7.0% 1.9% 26.3% 36.7% 19.2%	9.5% 14.7% 2.9% 11.6% 0.0%	61.3% 73.0% 91.4% 31.2% 0.3% 47.3%	137 812 105 552 392 1,998
2016 Bronx Brooklyn Manhattan Queens Staten Island Citywide	1.8% 30.6% 6.3% 39.8% 52.2% <i>36.1%</i>	25.2% 14.6% 3.2% 38.4% 46.4% 30.7%	17.1% 14.0% 3.2% 10.3% 0.0% 8.9%	55.9% 40.9% 87.3% 11.5% 1.4% 24.3%	111 487 63 477 414 1,552
2017 Bronx Brooklyn Manhattan Queens Staten Island <i>Citywide</i>	6.4% 16.7% 5.3% 23.1% 57.8% 28.9%	22.1% 17.1% 6.6% 43.5% 41.6% 31.7%	13.6% 13.2% 3.9% 15.7% 0.4% <i>9.9%</i>	57.9% 53.0% 84.2% 17.8% 0.2% 29.5%	140 491 76 490 476 1,673

Source: U.S. Bureau of the Census, Manufacturing and Construction Division, Building Permits Branch.

F.3 Permits Issued For Housing Units by Quarter, 2007-2017

<u>Year</u>	<u>Bronx</u>	<u>Brooklyn</u>	<u>Manhattan</u>	Queens	Staten Island	<u>Total</u>
2007 Q1 Q2 Q3 Q4	1,037 901 794 356	2,621 3,478 2,071 2,760	1,551 1,544 3,589 2,836	1,864 3,255 1,086 1,420	191 192 189 167	7,264 9,370 7,729 7,539
2008 Q1 Q2 Q3 Q4	862 701 695 224	1,603 8,970 1,520 651	485 7,623 880 712	705 5,497 1,016 512	238 546 397 74	3,893 23,337 4,508 2,173
2009 Q1 Q2 Q3 Q4	164 130 497 856	137 511 243 112	151 716 336 160	508 353 331 282	117 233 144 76	1,077 1,943 1,551 1,486
2010 Q1 Q2 Q3 Q4	56 490 231 287	175 867 246 805	326 166 176 36	249 612 394 1,103	199 121 83 105	1,005 2,256 1,130 2,336
2011 Q1 Q2 Q3 Q4	205 508 248 155	291 624 303 304	146 1,199 391 799	411 1,416 459 896	88 228 178 87	1,141 3,975 1,579 2,241
2012 Q1 Q2 Q3 Q4	564 619 409 960	600 310 1,496 947	556 1,041 421 310	197 643 378 210	193 134 142 204	2,110 2,747 2,846 2,631
2013 Q1 Q2 Q3 Q4	214 1,066 336 1,022	1,184 1,117 1,918 1,921	568 1,162 1,708 1,418	428 730 1,006 997	162 689 172 177	2,556 4,764 5,140 5,535
2014 Q1 Q2 Q3 Q4	379 583 736 187	1,725 1,617 2,675 1,534	1,809 1,041 1,506 1,079	1,067 1,471 812 1,550	121 140 207 244	5,101 4,852 5,936 4,594
2015 Q1 Q2 Q3 Q4	561 1,269 1,651 1,201	3,574 15,453 1,163 5,836	1,154 9,760 1,057 641	782 9,182 250 2,453	112 151 175 103	6,183 35,815 4,296 10,234
2016 Q1 Q2 Q3 Q4	866 1,060 764 1,313	482 912 1,666 1,443	297 506 1,776 1,445	368 854 931 685	145 476 145 135	2,158 3,808 5,282 5,021
2017 Q1 Q2 Q3 Q4	1,124 1,267 1,050 1,960	2,097 1,454 1,000 1,579	1,486 1,004 1,183 1,138	1,434 1,801 1,033 836	202 154 170 159	6,343 5,680 4,436 5,672

Source: U.S. Bureau of the Census, Manufacturing and Construction Division, Building Permits Branch.

F.4 New Dwelling Units Completed in New York City, 1962-2017

<u>Year</u>	<u>Bronx</u>	<u>Brooklyn</u>	Manhattan	<u>Queens</u>	Staten Islan	<u>d</u> <u>Tota</u> l
1962	6,458	10,595	12,094	15,480	2,677	47,304
1963	8,780	12,264	19,398	17,166	2,423	60,031
1964	9,503	13,555	15,833	10,846	2,182	51,919
1965	6,247	10,084	14,699	16,103	2,319	49,452
1966	7,174	6,926	8,854	6,935	2,242	32,131
1967	4,038	3,195	7,108	5,626	3,069	23,036
1968	3,138	4,158	2,707	4,209	3,030	17,242
1969	1,313	2,371	6,570	3,447	3,768	17,469
1970	1,652	1,695	3,155	4,230	3,602	14,334
1971	7,169	2,102	4,708	2,576	2,909	19,464
1971	11,923	2,102	1,931	3,021	2,909 3,199	22,667
1973		4,340		3,415		
	6,294		2,918		3,969	20,936
1974	3,380	4,379	6,418	3,406	2,756	20,339
1975	4,469	3,084	9,171	2,146	2,524	21,394
1976	1,373	10,782	6,760	3,364	1,638	23,917
1977	721	3,621	2,547	1,350	1,984	10,223
1978	464	345	3,845	697	1,717	7,068
1979	405	1,566	4,060	1,042	2,642	9,715
1980	1,709	708	3,306	783	2,380	8,886
1981	396	454	4,416	1,152	2,316	8,734
1982	997	332	1,812	2,451	1,657	7,249
1983	757	1,526	2,558	2,926	1,254	9,021
1984	242	1,975	3,500	2,291	2,277	10,285
1985	557	1,301	1,739	1,871	1,939	7,407
1986	968	2,398	4,266	1,776	2,715	12,123
1987	1,177	1,735	4,197	2,347	3,301	12,757
1988	1,248	1,631	5,548	2,100	2,693	13,220
1989	847	2,098	5,979	3,560	2,201	14,685
1990	872	929	7,260	2,327	1,384	12,772
1991	656	764	2,608	1,956	1,627	7,611
1992	802	1,337	3,750	1,498	1,136	8,523
1993	886	616	1,810	801	1,466	5,579
1994	891	1,035	1,927	1,527	1,573	6,953
1995	1,166	1,647	2,798	1,013	1,268	7,892
1996	1,075	1,583	1,582	1,152	1,726	7,118
1997	1,391	1,369	816	1,578	1,791	6,945
1998	575	1,333	5,175	1,263	1,751	10,097
1999	1,228	1,025	2,341	2,119	2,264	8,977
2000	1,385	1,353	6,064	2,096	1,896	12,794
2001	1,617	2,404	6,036	1,225	2,198	13,480
2002	1,220	2,248	8,326	1,981	2,453	16,228
2003	1,473	2,575	3,798	2,344	2,589	12,779
2004 π	3,326	4,512	6,150	3,087	2,291	19,366
2005 π	3,012	5,007	5,006	4,526	1,942	19,493
2006 π	4,311	6,418	5,199	5,940	1,900	23,768
2007 π	4,422	7,109	7,498	5,907	1,446	26,382
2008 π	4,217	7,254	6,118	5,437	1,019	24,045
2009 π	2,964	7,522	8,110	4,969	887	24,452
2010 π	3,948	7,181	7,801	4,401	714	24,045
2011 π	3,417	4,728	2,375	2,852	612	13,984
2012 π	1,413	3,611	1,159	2,632	640	9,455
2013 π	1,272	3,948	3,126	3,854	482	12,682
2 014 π	1,660	4,485	2,231	2,961	530	11,867
2015 π	2,396	5,324	2,986	3,110	541	14,357
2016 π	2,532	9,148	6,900	3,444	1,223	23,247
2017π	2,672	11,065	6,390	5,041	671	25,839

Note: Housing unit count is based on the number of Certificates of Occupancy issued by NYC Department of Buildings, or equivalent action by the Empire State Development Corporation or NYS Dormitory Authority. Prior years' data may be adjusted and may not match prior reports.

Source: NYC Department of City Planning, Housing Database 18v1, compilation of NYC DOB Applications and Certificates of Occupancy data.

 $[\]pi$ Data from 2004-2017 now includes Final Certificates of Occupancy (as with all other years) as well as Temporary Certificates of Occupancy data for the first time. Data will be updated every year to reflect the most current estimates.

F.5 Number of Residential Co-op and Condo Plans Accepted for Filing By the NYS Attorney General's Office, 2012-2017

	2012	2013	2014	2015	2016	2017
	Plans (Units)	Plans (Units)	Plans (Units)	Plans (Units)	Plans (Units)	Plans (Units)
Private Plans New Construction Rehabilitation Conversion (Non-Eviction) Conversion (Eviction) Private Total	111 (2,554) 8 (81) 24 (1,293) 0 143 (3,928)	150 (3,658) 21 (649) 16 (819) 0 187 (5,126)	211 (5,171) 37 (462) 20 (3,956) 0 268 (9,589)	219 (8,880) 43 (607) 28 (3,065) 0 290 (12,552)	210 (6,653) 45 (416) 27 (1,602) 0 282 (8,671)	228 (6,906) 33 (688) 18 (764) 0 279 (8.358)
	Plans (Units)	Plans (Units)	Plans (Units)	Plans (Units)	Plans (Units)	Plans (Units)
HPD Sponsored Plans						
New Construction	0	1 (95)	0	0	0	0
Rehabilitation	0	0	0	0	0	0
Conversion (Non-Eviction)	0	0	0	0	0	0
Conversion (Eviction) HPD Total	3 (97) 3 (97)	0 1 (95)	0 0	1 (70) 1 (70)	0 0	0 0
Grand Total	146 (4,025)	188 (5,221)	268 (9,589)	291 (12,622)	282 (8,671)	279 (8,358)

Note: Figures exclude "Homeowner," "No Action," and "Commercial" plans/units. Source: New York State Attorney General's Office, Real Estate Financing Bureau.

F.6 Number of Units in Co-op and Condo Plans Accepted for Filing By the NYS Attorney General's Office, 1989-2017

<u>Year</u>	New Construction	Conversion Eviction	Conversion Non-Eviction	Rehabilitation	Iotal lew Construction nversion & Rehab	<u>)</u>	Units in HPD Sponsored Plans
1989	6,153	137	25,459		31,749		945
1990	4,203	364	14,640		19,207		1,175
1991	1,111	173	1,757		3,041		2,459
1992	793	0	566		1,359		1,674
1993	775	41	134		950		455
1994	393	283	176	807	1,659		901
1995	614	426	201	1,258	2,499		935
1996	83	16	196	284	579		0
1997	1,417	38	131	852	2,438		533
1998	3,225	0	386	826	4,437		190
1999	1,123	343	359	1,029	2,854		295
2000	1,911	203	738	220	3,072		179
2001	3,833	22	1,053	124	5,032		22
2002	2,576	260	1,974	348	5,158		260
2003	4,870	0	639	418	5,927		0
2004	6,018	274	1,550	334	8,176		274
2005	12,210	269	2,356	223	15,058		269
2006	19,870	273	6,331	0	26,474		273
2007	19,511	248	5,441	71	25,271		248
2008	13,998	241	2,582	130	16,951		241
2009	7,270	274	725	73	8,342		274
2010	4,907	59	812	0	5,778		59
2011	3,785	209	457	14	4,465		209
2012	2,554	97	1,293	81	4,025		97
2013	3,753	0	819	649	5,221		95
2014	5,171	0	3,956	462	9,589		0
2015	8,880	73	3,065	607	12,622		70
2016	6,653	0	1,602	416	8,671		0
2017	6,906	0	764	688	8,358		0

Note: Rehabilitated units were tabulated separately beginning in 1994. HPD Plans are a subset of all plans.

Source: New York State Attorney General's Office, Real Estate Financing Bureau.

F.7 Tax Incentive Programs, 2015-2017

Buildings Newly Receiving Certificates for 421-a Exemptions

	2015				2016				2017			
	<u>Certificates</u>	Buildings	<u>Units</u>	Certificates	<u>Buildings</u>	<u>Units</u>		Certificates	<u>Buildings</u>	<u>Units</u>		
Bronx Brooklyn Manhattan Queens Staten Island	11 80 22 29 1	29 92 22 36 1	151 2,107 1,804 1,395 11	8 72 16 37 0	10 92 16 38 0	209 2,672 839 773 0		273 162 63 240 2	117 442 67 338 2	1,542 8,195 7,448 3,587 32		
TOTAL	143	180	5,468	133	156	4,493		740	966	20,804		

Buildings Newly Receiving J-51 Tax Abatements and Exemptions

	2015				2016				2017		
	<u>Buildings</u>	<u>Units</u>	Certified Cost (\$1,000s)	Buildings	<u>Units</u>	Certified Cost (\$1,000s)	<u>Buildings</u>	<u>Units</u>	Certified Cost (\$1,000s)		
Bronx Brooklyn Manhattan Queens Staten Island	173 252 60 1,680 10	11,534 11,326 2,836 17,412 1,151	\$18,065 \$22,622 \$9,675 \$16,902 \$4,177	346 175 40 1,630	13,312 7,694 1,778 11,525 2	\$22,934 \$18,682 \$9,859 \$10,807 \$65	180 126 34 1,072	6,519 4,625 3,703 7,992 38	\$13,847 \$12,044 \$12,578 \$7,511 \$195		
TOTAL	2,175	44,259	\$71,441	2,192	34,311	\$62,347	1,413	22,877	\$46,175		

Source: NYC Department of Housing Preservation and Development, Office of Development, Tax Incentive Programs.

F.8 Tax Incentive Programs – Units Receiving Initial Benefits, 1981-2017

<u>Year</u>	<u>421-a</u>	<u>J-51</u>	<u>Year</u>	<u>421-a</u>	<u>J-51</u>
1981	3,505		2000	2,828	83,925
1982	3,620		2001	4,870	81,321
1983	2,088		2002	4,953	70,145
1984	5,820		2003	3,782	74,005
1985	5,478		2004	6,738	117,503
1986	8,569		2005	5,062	66,370
1987	8,286		2006	3,875	66,010
1988	10,079	109,367	2007	4,212	55,681
1989	5,342	64,392	2008	4,521	64,478
1990	980	113,009	2009	4,613	37,867
1991	3,323	115,031	2010	5,895	50,263
1992	2,650	143,593	2011	11,007	54,775
1993	914	122,000	2012	10,856	45,886
1994	627	60,874	2013	7,890	55,659
1995	2,284	77,072	2014	6,945	40,787
1996	1,085	70,431	2015	5,468	44,259
1997	2,099	145,316	2016	4,493	34,311
1998	2,118	103,527	2017	20,804	22,877
1999	6,123	82,121			

Source: New York City Department of Housing Preservation and Development, Office of Development, Tax Incentive Programs.

F.9 Building Demolitions in New York City, 1985-2017

	Bro	onx	Brook	dyn	Manha	attan	Que	ens	Staten	Island	Tot	al
	5+		5+		5+		5+		5+		5+	
<u>Year</u>	<u>Units</u>	<u>Total</u>										
1985	81	157	3	101	59	73	3	133	1	31	147	495
1986	48	96	14	197	19	38	3	273	4	67	88	671
1987	14	55	2	130	22	33	1	273	6	83	45	574
1988	3	34	2	169	25	44	2	269	0	160	32	676
1989	6	48	8	160	20	38	3	219	0	109	37	574
1990	4	29	3	133	20	28	5	119	0	71	32	380
1991	10	33	15	95	9	14	1	68	0	32	35	242
1992	12	51	6	63	2	5	1	41	0	33	21	193
1993	0	17	4	94	0	1	3	51	0	5	7	168
1994	3	14	4	83	5	5	2	42	0	8	14	152
1995	2	18	0	81	0	0	2	37	0	17	4	153
1996	-	30	-	123	-	25	-	118	-	84	-	380
1997	-	29	-	127	-	51	-	168	-	119	-	494
1998	-	71	-	226	-	103	-	275	-	164	-	839
1999	-	67	-	211	-	53	-	227	-	159	-	717
2000	-	64	-	499	-	101	-	529	-	307	-	1,500
2001	-	96	-	421	-	160	-	519	-	291	-	1,487
2002	-	126	-	500	-	89	-	600	-	456	-	1,771
2003	-	161	-	560	-	100	-	865	-	564	-	2,250
2004	-	238	-	691	-	141	-	1,128	-	547	-	2,745
2005	-	245	-	1,080	-	145	-	1,545	-	477	-	3,492
2006	-	334	-	1,109	-	259	-	1,485	-	381	-	3,568
2007	-	302	-	984	-	282	-	1,407	-	308	-	3,283
2008	-	206	-	925	-	252	-	1,082	-	215	-	2,680
2009	-	166	-	467	-	153	-	663	-	177	-	1,626
2010	-	121	-	326	-	76	-	464	-	129	-	1,116
2011	-	93	-	308	-	124	-	463	-	141	-	1,129
2012	-	121	-	284	-	144	-	434	-	139	-	1,122
2013	-	105	-	367	-	145	-	453	-	216	-	1,286
2014	-	125	-	454	-	121	-	555	-	258	-	1,513
2015	-	116	-	668	-	225	-	612	-	266	-	1,887
2016	-	139	-	642	-	178	-	655	-	235	-	1,849
2017	-	136	-	573	-	114	-	579	-	320	-	1,722

Note: The Census Bureau discontinued collecting demolition statistics in December, 1995. The New York City Department of Buildings began supplying the total number of buildings demolished from 1996 forward, but does not specify whether buildings are residential or whether they have 5+ units. Demolition statistics from 1985 though 1995 are solely residential buildings.

Source: U.S. Bureau of the Census, Manufacturing and Construction Division, Building Permits Branch; New York City Department of Buildings.

G.1 Additions to the Stabilized Housing Stock, 1994-2017

<u>Year</u>	<u>421-a</u>	<u>J-51</u>	Mitchell-Lar State	na Buyouts <u>City</u>	Lofts	<u>421-g</u>	<u>420-c</u> Ω	Article 11/14/15	Formerly Controlled	<u>Total</u> †
1994		114	0	0	_	_	_	_	_	114
1995	_	88	306	0	_	_	_	_	-	394
1996	_	8	0	0	_	_	_	_	-	8
1997	_	38	323	0	_	_	_	_	-	361
1998	_	135	574	1,263	64	_	_	_	-	2,036
1999	_	33	286	0	71	_	_	_	-	390
2000	_	224	0	0	96	_	_	_	-	320
2001	_	494	0	0	56	_	_	_	-	550
2002	_	260	0	232	16	_	_	_	-	508
1994-2002	20,240	1,394	1,489	1,495	303	865	5,500	_	31,159	62,445
2003	1,929	171	0	279	20	41	0	_	916	3,356 [†]
2004	4,941	142	0	229	129	188	0	_	706	6,335 [†]
2005	3,380	25	251	481	66	79	0	_	721	5,003 [†]
2006	2,264	130	285	2,755	81	5	0	-	634	6,154 [†]
2007	2,838	135	2,227	290	35	441	0	-	592	6,558 [†]
2008	1,856	55	0	101	35	865	0	-	887	3,799 [†]
2009	2,438	18	112	0	36	0	0	-	519	3,123 [†]
2010	7,596	80	0	0	9	0	0	-	451	8,136 [†]
2011	3,155	498	0	0	6	0	0	-	438	4,097 [†]
2012	2,509	108	132	0	17	0	0	-	360	3,126 [†]
2013	5,975	407	0	0	26	0	0	-	309	6,717 [†]
2014	3,110	243	318	0	21	0	0	-	211	3,903 [†]
2015	2,515	0	0	0	18	0	0	-	270	2,803
2016	4,921	0	0	716	5	0	0	828	377	6,847
2017	9,376	0	143	90	10	0	0	1,283	142	11,044
Total	79,043	3,406	4,957	6,436	817	2,484	$5,500^{\Omega}$	2,111	38,692	143,446 [†]

 Ω Figures for 2003-2014 have been revised from those reported in prior reports, due to the removal of 420-c program units. See *Changes to the Rent Stabilized Housing Stock in NYC in 2015*, for more information: http://www1.nyc.gov/assets/rentguidelinesboard/pdf/changes16.pdf

421-a Notes: Between 1994-2002, a count of 26,987 421-a units includes co-op and condo units that were created under the 421-a program. Analysis of the Real Property Asset Database (RPAD) shows that on average from 1994 to 2002, 25% of 421-a units were owner units and 75% were rental units. Therefore an estimated 20,240 units were added to the rent stabilized stock. Since 2003, 421-a data is obtained from HCR, which provides 12 months worth of data from April 1 to March 31 of the following year, as shown above.

J-51 Notes: The numbers represent units that were not rent stabilized prior to entering the J-51 Program. Most units participating in the J-51 Program were rent stabilized prior to their J-51 status and therefore are not considered additions to the rent stabilized stock.

Article 11, 14 and 15 Notes: Data prior to 2016 not available.

Loft Notes: Loft conversion counts are not available from 1994 to 1997.

421-g, 420-c and Rent Controlled Notes: Counts for individual years between 1994 and 2002 are not available; only an aggregate is available.

421-g Note: The 421-g tax incentive program provides a 14-year tax exemption and abatement benefits for the conversion of commercial buildings to multiple dwellings in the Lower Manhattan Abatement Zone, generally defined as the area south of the centerline of Murray, Frankfort and Dover Streets, excluding Battery Park City and the piers. All rental units in the project become subject to rent stabilization for the duration of the benefits. No additional units will be added since the program required that building permits be dated on or before June 30, 2006.

Sources: NYC Department of Housing Preservation and Development (HPD), Tax Incentive Programs and Division of Housing Supervision (Mitchell-Lama Developments); NYS Homes and Community Renewal (HCR), Office of Rent Administration, annual registration data, and Office of Housing Operations; and NYC Loft Board.

[†] Totals have been revised from those reported in prior years due to the removal of 420-c additions. See above note.

G.2 Additions to the Stabilized Housing Stock by Borough, 2017

	<u>Bronx</u>	<u>Brooklyn</u>	<u>Manhattan</u>	Queens	Staten Island	<u>Total</u>
421-a	504	5,309	1,996	1,561	6	9,376
420-c	0	0	0	0	0	0
J-51	0	0	0	0	0	0
Mitchell-Lama Buyouts (City & State)	233	0	0	0	0	233
Lofts	0	1	9	0	0	10
Article 11, 14 or 15	0	824	183	0	276	1,283
Formerly Controlled	20	30	62	30	0	142
Total Additions	757	6,164	2,250	1,591	282	11,044

Sources: NYC Department of Housing Preservation and Development (HPD), Tax Incentive Programs and Division of Housing Supervision (Mitchell-Lama Developments); NYS Homes and Community Renewal (HCR), Office of Rent Administration, annual registration data, and Office of Housing Operations; and NYC Loft Board.

G.3 Average and Median Rent of Initially Registered Rent Stabilized Apartments by Borough, 2017

	<u>Bronx</u>	<u>Brooklyn</u>	<u>Manhattan</u>	Queens	Staten Island	<u>Citywide</u>
Average Rent	\$1,592	\$3,214	\$5,821	\$3,304	\$1,553	\$3,606
Median Rent	\$1,553	\$2,595	\$4,868	\$3,000	\$1,561	\$2,685

G.4 Subtractions from the Stabilized Housing Stock Due to High-Rent High-Income Deregulation by Borough, 1994-2017

<u>Year</u>	Bronx	Brooklyn	<u>Manhattan</u>	Queens	Staten Island	<u>Total</u>
1994	0	0	904	0	0	904
1995	0	0	346	0	0	346
1996	1	0	180	4	0	185
1997	1	0	157	2	0	160
1998	3	0	366	3	0	372
1999	2	1	279	1	0	283
2000	2	1	227	0	0	230
2001	3	0	209	2	0	214
2002	1	1	258	2	0	262
2003	2	13	177	6	0	198
2004	0	13	173	8	0	194
2005	4	30	220	11	0	265
2006	8	28	244	21	0	301
2007	9	45	241	14	0	309
2008	10	50	198	20	0	278
2009	16	57	364	20	0	457
2010	9	44	256	27	0	336
2011	6	38	149	19	0	212
2012	5	31	119	10	0	165
2013	3	32	74	18	0	127
2014	4	21	149	12	0	186
2015	13	37	50	9	0	109
2016	1	30	92	23	0	146
2017	6	32	49	20	0	107
Total	109	504	5,481	252	0	6,346

G.5 Subtractions from the Stabilized Housing Stock Due to High-Rent Vacancy Deregulation by Borough, 1994-2017

<u>Year</u>	Bronx	Brooklyn	<u>Manhattan</u>	Queens	Staten Island	<u>Total</u>
1994	3	9	544	9	0	565
1995	1	111	927	8	0	1,047
1996	10	106	1,203	6	0	1,325
1997	6	77	1,121	0	0	1,204
1998	7	116	2,247	14	0	2,384
1999	11	151	3,586	37	0	3,785
2000	7	279	2,586	62	0	2,934
2001	53	294	4,490	145	0	4,982
2002	64	391	5,431	251	7	6,144
2003	83	640	7,048	416	17	8,204
2004	101	758	7,271	697	29	8,856
2005	184	852	7,303	904	29	9,272
2006	217	1,408	7,187	1,106	65	9,983
2007	375	1,409	7,114	1,380	64	10,342
2008	447	1,884	8,600	1,787	82	12,800
2009	537	2,013	8,718	2,195	94	13,557
2010	581	2,154	7,807	2,290	79	12,911
2011	654	2,256	6,378	2,032	44	11,364
2012	281	1,189	4,289	922	32	6,713
2013	197	994	2,924	654	32	4,801
2014	309	1,247	3,572	1,056	51	6,235
2015	432	1,773	4,280	1,510	54	8,049
2016	179	1,132	2,522	824	33	4,690
2017	186	870	1,738	695	28	3,517
Total	4,925	22,113	108,886	19,000	740	155,664

Note: Prior to 2014, registration of deregulated units with HCR was voluntary. These totals therefore represent a 'floor' or minimum count of the actual number of deregulated units in these years. Since 2014, the annual apartment registration must indicate that an apartment is permanently exempt. See "High-Rent Vacancy Deregulation" section on page 90 for more information.

G.6 Subtractions from the Stabilized Housing Stock, 1994-2017

<u>Year</u>	High-Rent High-Income Deregulation	High-Rent Vacancy <u>Deregulation</u>	Co-op/Condo Conversion	421-a Expiration	J-51 <u>Expiration</u>	Substantial <u>Rehab</u>	Commercial/ Professional Conversion	Other	<u>Total</u>
1994	904	565	5,584	2,005	1,345	332	139	1,904	12,778
1995	346	1,047	4,784	990	1,440	334	113	1,670	10,724
1996	185	1,325	4,733	693	1,393	601	117	1,341	10,388
1997	160	1,204	3,723	1,483	1,340	368	109	1,365	9,752
1998	372	2,384	3,940	2,150	1,412	713	78	1,916	12,965
1999	283	3,785	2,822	3,514	1,227	760	110	1,335	13,836
2000	230	2,934	3,147	3,030	884	476	729	1,372	12,802
2001	214	4,982	2,153	770	1,066	399	88	1,083	10,755
2002	262	6,144	1,774	653	1,081	508	45	954	11,421
2003	198	8,204	1,474	651	854	340	59	912	12,692
2004	194	8,856	1,564	493	609	268	79	954	13,017
2005	265	9,272	1,692	451	545	692	111	1,017	14,045
2006	301	9,983	1,567	263	236	350	135	1,139	13,974
2007	309	10,342	1,455	161	270	297	66	1,304	14,204
2008	278	12,800	1,405	376	176	421	56	1,321	16,833
2009	457	13,557	1,153	1,075	286	441	62	1,557	18,588
2010	336	12,911	1,130	657	143	274	32	1,424	16,907
2011	212	11,364	1,098	415	230	174	29	653	14,175
2012	165	6,713	924	336	244	481	74	562	9,499
2013	127	4,801	774	757	188	308	31	611	7,597
2014	186	6,235	789	1,011	137	226	13	416	9,013
2015	109	8,049	618	1,079	287	288	13	369	10,812
2016	146	4,690	665	749	460	216	160	438	7,524
2017	107	3,517	672	1,363	363	211	24	400	6,657
Total	6,346	155,664	49,640	25,125	16,216	9,478	2,472	26,017	290,958

Co-op/Condo Note: Subtractions from the stabilized stock in co-ops and condos are due to two factors: (1) stabilized tenants vacating rental units in previously converted buildings and (2) new conversions of stabilized rental units to ownership.

High-Rent Vacancy Deregulation Note: Prior to 2014, registration of deregulated units with HCR was voluntary. These totals therefore represent a 'floor' or minimum count of the actual number of deregulated units in these years. Since 2014, the annual apartment registration must indicate that an apartment is permanently exempt. See "High-Rent Vacancy Deregulation" section on page 90 for more information.

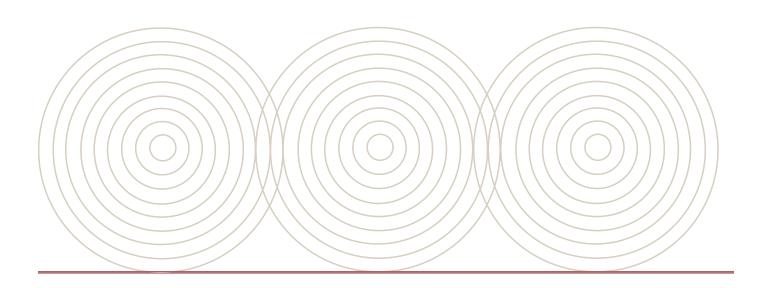
Source: NYS Homes and Community Renewal (HCR), Office of Rent Administration, annual registration data.

G.7 Subtractions from the Stabilized Housing Stock by Borough, 2017

	Bronx	<u>Brooklyn</u>	<u>Manhattan</u>	Queens	Staten Island	<u>Total</u>
High Rent/High Income Deregulation	6	32	49	20	0	107
High Rent/Vacancy Deregulation	186	870	1,738	695	28	3,517
Co-op/Condo Conversion	71	118	253	230	0	672
421-a Expirations	23	189	1,017	112	22	1,363
J-51 Expirations	1	33	323	6	0	363
Substantial Rehabilitation	0	95	84	32	0	211
Commercial/Professional Conversion	7	3	10	4	0	24
Other	13	62	264	61	0	400
Total Subtractions	307	1,402	3,738	1,160	50	6,657

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Glossary of Rent Regulation

1/40th Increase: See "Individual Apartment

Improvements"

1/60th Increase: See "Individual Apartment

Improvements"

421-a Tax Incentive Program (a.k.a. Affordable New York Housing Program): Created in 1970 and amended periodically by the NYS Legislature. Offers tax exemptions to qualifying new multifamily properties containing three or more rental units. Apartments built with 421-a tax exemptions are subject to the provisions of the Rent Stabilization Laws during the exemption period. Thus, 421-a tenants share the same tenancy protections as stabilized tenants and initial rents are then confined to increases established by the Rent Guidelines Board.

Adjustable Rate Mortgage (ARM): Similar to a variable rate mortgage except that interest rate adjustments are capped in order to protect lenders and borrowers from sudden upturns or downturns in a market index.

Affordable Housing: As defined by the United States Department of Housing and Urban Development, any housing accommodation for which a tenant household pays 30% or less of its income for shelter.

Affordable New York Housing Program: See "421-a Tax Incentive Program"

Balloon Loan: A loan that is partially amortized, meaning that principal is partially paid throughout the term of the loan. At maturity, the borrower still has a substantial sum (balloon) that must be repaid or refinanced.

Class A Multiple Dwelling: As defined under the Multiple Dwelling Law, a multiple dwelling building which is generally occupied as a permanent residence. The class includes such buildings as apartment houses, apartment hotels, maisonette apartments, and all other multiple dwellings except Class B dwellings.

Class B Multiple Dwelling: A multiple dwelling which is occupied, as a rule, transiently, as the more or less temporary abode of individuals or families. This class includes such buildings as hotels, lodging houses, rooming houses, boarding schools, furnished room houses, college and school dormitories.

Condominium (Condo): A form of property ownership in which units are individually owned and the owners acquire shares in an association that owns and cares for common areas.

Cooperative (Co-op): A form of property ownership in which a building or complex is owned by a corporation. Shares in the corporation are allocated per apartment and the owners of those shares, who are called proprietary lessees, may either live in the apartment for which the shares are allocated or rent that apartment to a sub-tenant.

Core Manhattan: The area of Manhattan south of 96th Street on the East Side and 110th Street on the West Side. See also "Upper Manhattan."

Debt Service: Repayment of loan principal and interest; the projected debt service is the determining factor in setting the amount of the loan itself.

Debt Service Ratio: The net operating income divided by the debt service; it measures a borrower's ability to cover mortgage payments using a building's net operating income.

Decontrol: See "Deregulation."

Department of Housing Preservation and Development (HPD): The New York City agency with primary responsibility for promulgating and enforcing housing policy and laws in the City. (Also see DHCR)

Deregulation: Also known as "Decontrol" or "Destabilization." Deregulation occurs by action of the owner when an apartment under either rent control or rent stabilization legally meets the criteria for leaving regulation. When an apartment is deregulated, the rent may be set at 'market rate.' There are two types of deregulation, "High-Rent/High-Income Deregulation" and "High-Rent Vacancy Deregulation." See these individual terms for more details.

Destabilization: See "Deregulation."

DHCR: See "Division of Housing and Community Renewal."

Disability Rent Increase Exemption (DRIE): A program which freezes the rent of a New York City tenant or

tenant's spouse who is disabled (defined as receiving either Federal Supplemental Security Income, Federal Social Security Disability Insurance, US Department of Veterans Affairs disability pension or compensation, or Disability-related Medicaid) and living in a rent regulated apartment. To currently qualify for this benefit, a household of any size must make a combined household income no more than \$50,000 per year, as well as paying at least 1/3 of their income toward their rent.

Discount Rate: The interest rate Federal Reserve Banks charge for loans to depository institutions.

Distressed Buildings: Buildings that have operating and maintenance expenses greater than gross income are considered distressed.

Division of Housing and Community Renewal (DHCR): Part of NYS Homes & Community Renewal (HCR), the New York State agency with primary responsibility for formulating New York State housing policy, and monitoring and enforcing the provisions of the state's residential rent regulation laws.

Emergency Tenant Protection Act of 1974 (ETPA): Chapter 576 Laws of 1974: In Nassau, Rockland and Westchester counties, rent stabilization applies to nonrent controlled apartments in buildings of six or more units built before January 1, 1974 in localities that have declared an emergency and adopted ETPA. In order for rents to be placed under regulation, there has to be a rental vacancy rate of less than 5% for all or any class or classes of rental housing accommodations. municipalities limit ETPA to buildings of a specific size, for instance, buildings with 20 or more units. Each municipality declaring an emergency and adopting local legislation pays the cost of administering ETPA (in either Nassau, Rockland or Westchester County). In turn, each municipality can charge the owners of subject housing accommodations a fee (up to \$10 per unit per year).

Eviction: An action by a building owner in a court of competent jurisdiction to obtain possession of a tenant's housing accommodation.

Fair Market Rents (FMR): In New York City, when a tenant voluntarily vacates a rent controlled apartment, the apartment becomes decontrolled. If that apartment is in a building containing six or more units, the apartment becomes rent stabilized. The owner may charge the first stabilized tenant a fair market rent. All future rent increases are subject to limitations under the Rent

Stabilization Law, whether the same tenant renews the lease or the apartment is rented to another tenant. The Rent Stabilization Law permits the first stabilized tenant after decontrol to challenge the first rent charged after decontrol, through a Fair Market Rent Appeal, if the tenant believes that the rent set by the owner exceeds the fair market rent for the apartment. The Appeal is decided taking into consideration the Fair Market Rent Special Guideline and rents for comparable apartments.

Family Assistance Program (FAP): NY State's TANF program. See "Temporary Assistance to Needy Families."

Federal Deposit Insurance Corporation (FDIC): Established by the federal government in 1950 to insure the deposits of member banks and savings associations.

Federal Reserve Board: The central bank of the United States founded by Congress in 1913 to provide the nation with a safer, more flexible, and more stable monetary and financial system.

Federal Funds Rate: Set by the Federal Reserve, this is the rate banks charge each other for overnight loans.

Fixed Rate Mortgage (FRM): The interest rate is constant for the term of a mortgage.

Fuel Cost Adjustment: The New York City Rent Control Law allows separate adjustments based on the changes, up or down, in the price of various types of heating fuels. The adjustment will be based on fuel price changes between the beginning and end of the prior year. Only tenants in rent controlled apartments located in New York City are subject to this fuel cost adjustment. Early rent stabilized New York City Rent Guidelines Board orders also contained supplementary guidelines adjustments denominating fuel cost adjustments.

Gross City Product (GCP): The dollar measurement of the total citywide production of goods and services in a given year.

Guideline Rent Increases: The percentage increase of the Legal Regulated Rent that is allowed when a new or renewal lease is signed. This percentage is determined by the New York City Rent Guidelines Board for renewal leases signed between October 1 of the current year and September 30 of the following year. The percentage increase allowed is dependent on the term of the lease and whether the lease is a renewal or vacancy lease (see 'Vacancy Allowance'). Although in the past the RGB

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customarily set increases for vacancy leases, it has not done so since the passage of the Rent Regulation Reform Act of 1997, which established statutory vacancy increases. Sometimes additional factors, such as the amount of the rent, whether or not electricity is included in the rent and the past rental history, have also resulted in varying adjustments.

High-Rent/High-Income Deregulation ("Luxury Decontrol"): The change in an apartment's status from being rent regulated to being deregulated because the household income of the tenant's in the apartment exceeds a certain threshold AND the rent of the apartment exceeds a certain threshold. These guidelines were modified with the passage of the Rent Act of 2015. Refer to the NYS Division of Housing and Community Renewal for the most current information about these thresholds.

High-Rent/Vacancy Deregulation ("Vacancy Decontrol"): A process by which a rent regulated unit becomes deregulated upon the vacancy of the prior tenant, when the rent of the apartment exceeds a certain threshold. These guidelines were modified with the passage of the Rent Act of 2015. Refer to the NYS Division of Housingand Community Renewal for the most current information about these thresholds.

Home Relief: See "Safety Net Assistance."

Hotel: Under rent stabilization, a multiple dwelling that provides all of the following services included in the rent:

- (1) Maid service, consisting of general house cleaning at a frequency of at least once a week;
- Linen service, consisting of providing clean linens at a frequency of at least once a week;
- (3) Furniture and furnishings, including at a minimum a bed, lamp, storage facilities for clothing, chair and mirror in a bedroom; such furniture to be maintained by the hotel owner in reasonable condition; and
- (4) Lobby staffed 24 hours a day, seven days a week by at least one employee.

Housing Maintenance Code: The code, enforced by the New York City Department of Housing Preservation and Development, provides for protection of the health and safety of apartment dwellers by setting standards for the operation, preservation and condition of buildings.

Housing and Vacancy Survey (HVS): A triennial survey of approximately 18,000 households conducted by the United States Census Bureau data. The survey is used, inter alia, to determine the vacancy rate for residential

units in New York City, and gather other information necessary for HPD, RGB, DHCR and other housing officials to formulate policy.

HPD: See "Department of Housing Preservation and Development."

HUD: The United States Department of Housing and Urban Development, which is the federal agency primarily responsible for promulgating and enforcing federal housing policy and laws.

HVS: See "Housing and Vacancy Survey."

I&E: Refers to the annual *Income and Expense Study* performed by the Rent Guidelines Board drawn from summarized data on RPIE forms, the income and expense statements filed annually by owners of stabilized buildings with the New York City Department of Finance.

Individual Apartment Improvements (IAI or "1/40th" or "1/60th"): An increase in rent based on increased services, new equipment, or improvements. increase is a NYS policy and is in addition to the regular annual Rent Guidelines Board increases for rent stabilized apartments and Maximum Base Rent increases for rent controlled apartments. If owners add new services, improvements, or new equipment to an occupied rent regulated apartment, owners of rent regulated units can add 1/40th or 2.5% of the cost of qualifying improvements to the legal rent of those units excluding finance charges (if there are 35 units or less in the building) or 1/60th or 1.67% of the cost of qualifying improvements to the legal rent of those units excluding finance charges (if there are more than 35 units in the building). E.g. (in a building with 35 units or less), (1) if an apartment's legal rent was \$500, and (2) the landlord made \$4,000 of qualifying improvements, then (3) the landlord thereafter could add 1/40th of the cost of those improvements—in this example. \$100—to apartment's existing legal monthly rent for a resulting new legal rent of \$600. The increase remains permanently in the monthly rent, even after the cost of the improvement is recouped. Owners must get the tenant's written consent to pay the increase and an order from DHCR is not required. If any apartment is vacant, the owner does not have to get written consent of a tenant to make the improvement and pass-on the increase.

Initial Legal Registered Rent: Under rent stabilization, the lawful rent for the use and occupancy of housing accommodations under the Rent Stabilization Law or the

Emergency Tenant Protection Act, as first registered with the DHCR, which has not been challenged pursuant to regulation, or if challenged, has been determined by the DHCR.

In Rem: In Rem units include those located in structures owned by the City of New York as a result of an in rem proceeding initiated by the City after the owner failed to pay tax on the property for one or more years. Though many of these units in multiple dwellings had previously been subject to either rent control or rent stabilization, they are exempt from both regulatory systems during the period of city ownership.

J-51 Tax Incentive Program: A New York City program under which, in order to encourage development and rehabilitation, property tax abatements and exemptions are granted. In consideration of receiving these tax abatements, and at least for the duration of the abatements, the owner of these buildings agree to place under rent stabilization those apartments which would not otherwise be subject to rent stabilization. This program provides real estate tax exemptions and abatements to existing residential buildings that are renovated or rehabilitated in ways that conform to the requirements of the statute. It also provides these benefits to residential buildings that were converted from commercial structures.

Legal Rent: The maximum rent level that a landlord is entitled to charge a tenant for a rent regulated unit. The landlord of a rent stabilized unit must annually register that legal rent with DHCR.

Legislature: The New York State Legislature.

Loft Board: A New York City agency that regulates lofts. Lofts are governed by Article 7-C of the Multiple Dwelling Law, and are not (until brought up to Code) within DHCR's rent regulatory jurisdiction.

Loan-to-Value Ratio (LTV): An expression of the safety of a mortgage principal based on the value of the collateral (e.g., an LTV of 50% means that a lender is willing to provide a mortgage up to half the value of a building). A decline in LTV may indicate a tightening of lending criteria and vice versa.

Longitudinal: The type of analysis that provides a comparison of identical elements over time, such as comparing data from 2018 to the same data in 2017.

Low Rent Supplement: See "Supplemental Adjustment."

Major Capital Improvements (MCI): When owners make improvements or installations to a building subject to the rent stabilization or rent control laws, they may be permitted to increase the building's rent based on the actual, verified cost of the improvement. To be eligible for a rent increase, the MCI must be a new installation and not a repair to old equipment. For example, an owner may receive an MCI increase for a new boiler or a new roof but not for a repaired or rebuilt one. Other buildingwide work may qualify as MCIs as well, such as "pointing and water-proofing" a complete building where necessary. The Rent Stabilization Code also stipulates that applications for MCI rent increases must be filed within two years of completion of the installation. MCI rent increases must be approved by DHCR.

Maximum Base Rent Program (MBR): The Maximum Base Rent Program is the mechanism for authorizing rent increases for New York City apartments subject to rent control so as to ensure adequate income for their operation and maintenance. New York City Local Law 30 (1970) stipulates that MBRs be established for rent controlled apartments according to a formula calculated to reflect real estate taxes, water and sewer charges, operating and maintenance expenses, return on capital value and vacancy and collection loss allowance. The MBR is updated every two years by a factor that incorporates changes in these operating costs.

Maximum Collectible Rent (MCR): The rent that rent controlled tenants actually pay is called the Maximum Collectible Rent (MCR). The MCR generally is less than the MBR. By law, the MCR cannot be increased by more than 7.5% per year for each year of the two year MBR cycle unless there are Major Capital Improvements or individual apartment rent increases. For example, if a tenant's rent (MCR) on 12/31/15 was \$1,000, and the MBR was \$1,200, then on 1/1/16 (effective date of MBR) the rent (MCR) would rise 7.5% to \$1,075 and the MBR ceiling would rise by 9.6% (the 2016-17 MBR factor) to \$1,315.20. On 1/1/17, the MBR would remain the same (since MBRs cover a two-year period), but the MCR would rise by another 7.5% to \$1,155.63.

Mean and Medians: The "mean" is an arithmetic average of numbers. Numbers at the extreme of a range can have a potentially distorting effect on the mean. The "median" is considered by many as a more constant measure of that same set of numbers because it moderates the distorting effect of any extremes or other aberrations, because it is the 50th percentile of the numbers under analysis, or the number in the middle.

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Net Operating Income (NOI): The amount of income remaining after operating and maintenance expenses are paid is typically referred to as Net Operating Income (NOI). NOI can be used for mortgage payments, improvements, federal, state and local taxes and after all expenses are paid, profit.

New Law Tenement: A "Class A" multiple dwelling constructed between 1901 and 1929 and subject to the regulations of the Tenement House Law. Distinguished from the old law tenement in terms of reduction of hazardous conditions and improved access to light and air.

New York City Housing Authority (NYCHA): The New York City agency that administers public housing and rental assistance programs.

NYC Rent Guidelines Board: See "Rent Guidelines Board."

Nominal Dollars: Dollars not adjusted to take inflation into account. See also "Real Dollars."

Old Law Tenement: A "Class A" multiple dwelling constructed before 1901 and subject to the regulations of the Tenement House Law.

O&M: Refers to the operating and maintenance expenses in buildings.

Operating Cost Ratio: The "cost-to-income" ratio, or the percentage of income spent on O&M expenses, is traditionally used by the RGB to evaluate estimated profitability of stabilized housing, presuming that buildings are better off by spending a lower percentage of revenue on expenses.

Orders: See "Rent Guidelines Orders."

Outer Boroughs: Queens, Brooklyn, the Bronx and Staten Island, or the boroughs of New York City not including Manhattan. These boroughs are often grouped together for purposes of analysis because their economic and demographic attributes are more similar to each other than those found in Manhattan.

PIOC: Price Index of Operating Costs. The major research instrument performed by the RGB staff to determine the annual change in prices for a market basket of goods and services used by owners to operate and maintain rent stabilized buildings.

Points: Up-front service fees charged by lenders.

Post-46 or Post-war: A common classification of residential buildings used by City agencies to describe buildings built after World War II. Buildings with six or more residential units constructed between 1947 and 1973, or after 1974 if the units received a tax abatement such as 421-a or J-51, are generally stabilized.

Preferential Rent: A rent charged by an owner to a tenant that is less than the established legal regulated rent. Owners are not necessarily required to base renewal lease increases on the preferential rent.

Pre-47 or Pre-war: A common classification of residential buildings used by City agencies to describe buildings built before the World War II. Buildings with six or more units constructed before February 1, 1947 are generally stabilized when the current tenant moved in on or after July 1, 1971.

Real Dollars: Dollars adjusted to take inflation into account. Real dollar figures offer a comparison between years that are pegged to the value of a dollar in a given year. See also "Nominal Dollars."

Registration: Owners are required to register all rent stabilized apartments with DHCR by filing an Annual Apartment Registration Form which lists rents and tenancy information as of April 1st of each year.

Renewal Lease: The lease of a tenant in occupancy renewing the terms of a prior lease entered into between the tenant and owner for an additional term. Tenants in rent stabilized apartments have the right to select a lease renewal for a one- or two-year term. The renewal lease must be on the same terms and conditions as the expiring lease unless a change is necessary to comply with a specific law or regulation or is otherwise authorized by the rent regulation. The owner may charge the tenant a Rent Guidelines Board authorized increase based on the length of the renewal lease term selected by the tenant. The law permits the owner to raise the rent during the lease term if the Rent Guidelines rate was not finalized when the tenant signed the lease renewal offer. A renewal lease should go into effect on or after the date that it is signed and returned to the tenant as well as on the day following expiration of the prior lease. In general, the lease and any rent increase may not begin retroactively. Penalties may be imposed when an owner does not timely offer the tenant a renewal lease or timely return to the tenant an executed copy thereof.

Rent Act of 2011: The law passed by the New York State Legislature in June, 2011 which revised several

regulations of rent stabilized units. Most notably, it provides for a maximum of one vacancy increase a year, modified the way individual apartment improvements are calculated, and raised the thresholds for both high-rent/vacancy deregulation and high-rent/high-income deregulation.

Rent Act of 2015: The law passed by the New York State Legislature in June, 2015 which revised several regulations of rent stabilized units. Most notably, it raised the rent thresholds for deregulation of rent stabilized units, altered the formula for calculating Major Capital Improvement Increases, and altered the formula for calculating vacancy lease increases.

Rent Control: The rent regulation program which generally applies to residential buildings constructed before February, 1947 in municipalities for which an end to the postwar rental housing emergency has not been declared. For an apartment to be under rent control, the tenant must generally have been living there continuously since before July 1, 1971 or for less time as a successor to a rent controlled tenant. When a rent controlled apartment becomes vacant, it either becomes rent stabilized or is removed from regulation, generally becoming stabilized if the building has six or more units and if the community has adopted Emergency Tenant Protection Act. Formerly controlled apartments may have been decontrolled on various other grounds. Rent control limits the rent an owner may charge for an apartment and restricts the right of an owner to evict tenants. It also obligates the owner to provide essential services and equipment. In New York City, rent increases are governed by the MBR system.

Rent Guidelines Board (RGB): The New York City agency responsible for setting the yearly rent-rate adjustments for the City's rent stabilized apartments, and also the agency which produced this publication. The Board is appointed by the Mayor and consists of two members who represent tenants, two members who represent the real estate industry and five public members.

RGB Rent Index: An index that measures the overall effect of the Board's annual rent increases on contract rents.

RGB: See "Rent Guidelines Board."

Rent Guidelines Orders: Rent guideline orders are issued by the rent guidelines boards annually, usually before July 1. For the most part, they establish the

percentage increases that may be given to rent stabilized/ETPA apartments upon lease renewal and for new leases. These increases are based on the review of operating expenses and other cost of living data.

RPIE Forms: Owners of stabilized buildings are required by Local Law 63 to file Real Property Income and Expense (RPIE) forms annually with the New York City Department of Finance. RPIE forms contain detailed financial information regarding the revenues earned and the costs accrued in the operation and maintenance of stabilized buildings. Buildings with fewer than 11 apartments (except those with commercial units); an assessed value of \$40,000 or less; or exclusively residential cooperatives or condominiums are exempt from filing. RPIE forms are also known as I&E forms.

Rent Regulation Reform Act of 1997 (RRRA-97): The law passed by the New York State Legislature in June, 1997 which promulgated several new provisions for rent regulated units. See "Luxury Decontrol", "Special Low Rent Increase", "Vacancy Allowance", "Vacancy Bonus" and "Vacancy Decontrol". Also known as the "Rent Act."

Rent Stabilization: In New York City, rent stabilized apartments are generally those apartments in buildings of six or more units built between February 1, 1947 and January 1, 1974. Tenants in buildings built before February 1, 1947, who moved in after June 30, 1971 are also covered by rent stabilization. A third category of rent stabilized apartments covers buildings subject to regulation by virtue of various governmental supervision or tax benefit programs. Generally, these buildings are stabilized only while the tax benefits or governmental suspension continues. In some cases, a building with as few as three units may be stabilized. Similar to rent control, stabilization provides other protections to tenants besides regulation of rental amounts. Tenants are entitled to receive required services, to have their leases renewed, and not to be evicted except on grounds allowed by law. Leases may be entered into and renewed for one or two year terms, at the tenant's choice.

Rent Stabilization Code: The Rent Stabilization Code is the body of regulations used by DHCR to implement the Rent Stabilization Law and Emergency Tenant Protection Act in New York City. These regulations affect nearly 1 million rent stabilized apartments in New York City. Chapter 888 of the Laws of 1985 authorized DHCR to amend the Rent Stabilization Code for New York City. The current Rent Stabilization Code became effective on May 1, 1987, with the latest revision in 2014.

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Rental Vacancy Rate: The percentage of the total rental units in an area that are vacant and available for occupancy. The vacancy rate for New York City is determined every three years by the Housing and Vacancy Survey.

Rooming House: Under rent regulation, in addition to its customary usage, a building or portion of a building, other than an apartment rented for single-room occupancy, in which housing accommodations are rented, on a short-term basis of daily, weekly or monthly occupancy, to more than two occupants for whom rent is paid, not members of the landlord's immediate family. The term shall include boarding houses, dormitories, trailers not a part of a motor court, residence clubs, tourist homes and all other establishments of a similar nature, except a hotel or a motor court.

Safety Net Assistance (SNA): An income assistance program set up under the New York State Welfare Reform Act of 1997 to replace Home Relief (HR).

Section 8 Vouchers: A federally-funded housing assistance program that pays participating owners on behalf of eligible tenants to provide decent, safe, and sanitary housing for very low income families at rents they can afford. Housing assistance payments are generally the difference between the local payment standard and 30% of the family's adjusted income. The family has to pay at least 10% of gross monthly income for rent. In NYC, the program is administered by NYCHA.

Section 8 Certificates: A federally-funded housing assistance program that provides housing assistance payments to participating owners on behalf of eligible tenants to provide decent, safe and sanitary housing for low income families in private market rental units at rents they can afford. This is primarily a tenant-based rental assistance program through which participants are assisted in rental units of their choice; however, a public housing agency may also attach up to 15% of its certificate funding to rehabilitated or newly constructed units under a project-based component of the program. All assisted units must meet program guidelines. Housing assistance payments are used to make up the difference between the approved rent due to the owner for the dwelling unit and the family's required contribution towards rent. Assisted families must pay the highest of 30% of the monthly adjusted family income, 10% of gross monthly family income, or the portion of welfare assistance designated for the monthly housing cost of the family.

Senior Citizen Rent Increase Exemption (SCRIE): If a New York City tenant or tenant's spouse is 62 years of age or over (living in a rent regulated apartment), and the combined household income is currently \$50,000 per year or less and they are paying at least 1/3 of their income toward their rent, the tenant may apply for the Senior Citizen Rent Increase Exemption (SCRIE). In New York City, the Department of Finance (DOF) administers the SCRIE program. Outside of New York City, Senior Citizen Rent Increase Exemption is a local option, and communities have different income eligibility limits and regulations. If a New York City tenant qualifies for this program, the tenant is exempt from future rent guidelines increases, Maximum Base Rent increases, fuel cost adjustments, MCI increases, and increases based on the owner's economic hardship. New York City senior citizen tenants may also carry this exemption from one apartment to another upon moving, upon the proper application being made to the Department of Finance.

Shelter Allowance: A rental grant provided to households receiving public assistance under the Family Assistance Program (FAP).

Single-Room Occupancy Housing (SRO): Residential properties in which some or all dwelling units do not contain bathroom or kitchen facilities. Under rent regulation, the occupancy by one or two persons of a single room, or of two or more rooms which are joined together, separated from all other rooms within an apartment in a multiple dwelling, so that the occupant or occupants thereof reside separately and independently of the other occupant or occupants of the same apartment.

Special Guideline: The New York City Rent Guidelines Board is obligated to promulgate special guidelines to aid the NYS Division of Housing and Community Renewal in its determination of initial legal regulated rents for housing accommodations previously subject to rent control. This is determined each year by the RGB as applicable to the determination of Fair Market Rent Appeals.

Special Low Rent Increase: This provision of the 1997 Rent Regulation Reform Act permits the landlords of units which rent for less than \$300 to charge those vacancy allowances otherwise permitted (including the "vacancy bonus") plus \$100. Moreover, if an apartment rented for between \$300 and \$500, this same provision of the Rent Act provides that "in no event shall the total increase pursuant to this [vacancy allowance provision of the Rent Act] be less than one hundred dollars per month."

Special Vacancy Allowance: See Vacancy Bonus

Statutory Vacancy Allowance: See Vacancy Allowance

Sublet: The temporary transfer of a tenant's legal interest in an apartment to another person. A tenant who sublets an apartment to another person is the prime tenant. The person to whom the apartment is sublet is the subtenant. In a sublet situation, the prime tenant must abide by the rent stabilization rules that govern the building owner.

Supplemental Adjustment: A rent increase that has been allowed in certain years in addition to a regular Guideline Rent increases for apartments. The supplementary adjustment amount is established for that guideline year by the New York City or County Rent Guidelines Boards based upon the date the lease was signed, the term of the lease and the county. Also known as the "Low Rent Supplement."

Surcharge: An added charge which is paid by the tenant but not included in the legal regulated rent and is not compounded by guidelines adjustments. Examples of surcharges are: the \$5.00 a month charge for an air conditioner that protrudes beyond the window line; the electrical charge for air conditioners in electrical inclusion buildings; and for the installation of window guards.

Tax Commission Income and Expense Form (TCIE): An application by building owners to appeal their tax assessments.

Temporary Assistance to Needy Families (TANF): An income assistance program set up under the federal Personal Responsibility and Work Opportunity Reconciliation Act of 1996 to replace Aid to Families with Dependent Children (AFDC). Under TANF block grant system, each state has the authority to determine who is eligible, the level of assistance, and how long it will last. The New York State's TANF program is called the Family Assistance Program (FAP).

Term: The length of time in which a mortgage is expected to be paid back to the lender; the shorter the term, the faster the principal must be repaid and consequently the higher the debt service and vice versa.

Transient Occupancy: Among the criteria that must be met for hotel rooms, tourist homes, and motor courts to be exempt from rent regulation is that they are used for transient occupancy. Whether occupancy is transient depends on a number of factors, including whether rates

are charged by the day, week, or month, and the proportions of occupants who stay for various lengths of time.

Upper Manhattan: The area of Manhattan north of 96th Street on the East Side and 110th Street on the West Side. See also "Core Manhattan."

Vacancy Allowance: A provision in the Rent Regulation Reform Act of 1997 (and following Acts) allowing owners of rent stabilized units to raise by a certain percentage the legal rent of a vacant unit. For an incoming tenant who opts for a two-year lease, the vacancy allowance is 20%. For an incoming tent who opts for a one-year lease, the vacancy allowance is 20% minus the percentage difference between the RGB's current guidelines for a two-year and a one-year lease. Other factors affect these percentages as well (see also the "Vacancy Bonus" and the "Special Low Rent Increase"). Changes to the formula for those apartments previously paying a preferential rent were also enacted in the Rent Act of 2015. For the 2018-2019 guideline period, the one-year vacancy guideline is 19% and the two-year guideline is 20%. With the passage of the Rent Act of 2011, as of June 24, 2011, landlords are permitted only one vacancy allowance per calendar year, regardless of the number of vacancies.

Vacancy Bonus: An additional rental increase allowed for units that become vacant after a long-term tenant has moved out. If the prior tenant had been in occupancy at least for eight years—and thus the unit had not "received" a vacancy allowance during that time—the Rent Regulation Reform Act of 1997 permits the landlord to charge an additional 0.6% for each year since the unit received its last vacancy allowance. For example, if (1) the incoming tenant opts for a two-year lease, after (2) the prior tenant had been in occupancy for ten years, then the landlord can charge the incoming tenant a 20% vacancy allowance (for a two-year lease) plus another 6% (ten years times 0.6%) for a total increase of 26% over the legal rent which had been paid by the departing tenant.

Vacancy Lease: When a person rents a rent stabilized apartment for the first time, or, when a new name (not the spouse or domestic partner) is added to an existing lease, this is a vacancy lease. This written lease is a contract between the owner and the tenant which includes the terms and conditions of the lease, the length of the lease and the rights and responsibilities of the tenant and the owner. The Rent Stabilization Law gives the new tenant (also called the vacancy tenant) the choice of a one- or two-year lease term. The rent the owner can charge may

Glossary

not be more than the last legal regulated rent plus all increases authorized by the Rent Stabilization Code, including increases for improvements to the vacant apartment.

Warranty of Habitability: Real Property Law Section 235-b entitles tenants to a livable, safe and sanitary apartment and building and remedies are specified when these conditions are not met.

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