

The Rent Guidelines Board 2000 Income & Expense Study

April 11, 2000

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Introduction

Under its mandate to establish rent adjustments for apartments subject to the Rent Stabilization Law, the Rent Guidelines Board (RGB) has analyzed the cost of operating and maintaining rental housing in New York City since the law's enactment in 1969. The Board's primary instrument for measuring cost shifts has been the Price Index of Operating Costs (PIOC), a survey of prices for various goods and services required to maintain apartment buildings.

In 1990, the RGB acquired a new data source that permitted independent verification of the PIOC's accuracy: RPIE, or Real Property Income and Expense (I&E) statements of rent stabilized buildings from the Department of Finance. These I&E statements, filed annually by property owners, provide detailed information on the revenues and costs of "income producing" properties. The addition of I&E statements markedly improved the information base utilized in the rent setting process. I&E statements not only describe conditions in rent stabilized housing in a given year, but also illuminate changes in conditions over a two-year period. More importantly, I&E data encompasses both revenues and expenses, allowing the Board to more accurately gauge the overall economic condition of New York's rent stabilized housing.

This I&E Study examines the conditions that existed in New York's rent stabilized housing market in 1998, the year for which the most recent data is available, and also the extent by which these conditions changed from the year before.

Local Law 63

The income and expense data for stabilized properties originates from Local Law 63, enacted by the New York City Council in 1986. This statute requires owners of apartment buildings to annually file Real Property Income and Expense (RPIE) statements with the Department of Finance. While certain types of properties are exempt from filing requirements—cooperatives, condominiums, or buildings with fewer than 11 units, or with an assessed value under \$80,000, Local Law 63's mandate produces detailed financial records on thousands of rent stabilized buildings. Although information on individual properties is strictly confidential, the Department of Finance is allowed to release summary statistics of the data.

Until last year, properties had to have a minimum assessed value of \$40,000 to be subject to filing requirements. Last year was the first year in which buildings with an assessed value of \$80,000 or less were no longer required to file an RPIE. In raising the minimum assessed value threshold for buildings from \$40,000 to \$80,000, the total number of filings was reduced, though this change only applies to about 2% of rent stabilized buildings with eleven or more units.

Since 1990, the RGB has received data on samples of rent stabilized properties that file RPIE forms. Samples in the first two studies were limited to 500 buildings, because RPIE files were not automated. Upon computerization of all I&E filings several years ago, the size of samples has risen to more than 10,000 properties and over 500,000 units.

Cross-Sectional Study

Rents and Income

In 1998, rent stabilized property owners collected monthly rent averaging \$681 per unit. As in prior years, units in pre-war buildings rented for less (an average of \$617 per month) than those in post-war buildings (\$849 per month). Stabilized rents were highest in Manhattan (\$892), followed by Queens (\$609), Brooklyn (\$536) and the Bronx (\$508).

Rents stated in RPIE filings tend to be lower than figures obtained from both the triennial New York City Housing and Vacancy Survey (HVS) and the Division of Housing and Community Renewal (DHCR). This is primarily because RPIE averages measure rents actually collected each month, while the HVS deals strictly with contract rents (i.e. the amounts stated on leases, which includes both legal and preferential rents) and DHCR reports legal rents. Unlike the other two indices, in measuring rents actually collected, RPIE data accounts for vacancy and collection losses. Average rents from the HVS and DHCR registration data merely reflect contract and legal rents, which may not be collected in full due to vacancies or non payment of rent. Additionally, RPIE information reflects rents collected over a 12-month period, while HVS figures apply primarily to contract rents in effect during the first quarter of 1999, though some figures are collected in the second quarter.

Since the 1999 HVS is now available, comparisons can be made between the mean contract rent for all regulated apartments and the RPIE rent. It should be noted that HVS rent figures reflect rents that were in effect in the beginning of 1999 and therefore a more accurate comparison can be made next year when RPIE data filed will reflect circumstances faced by owners in 1999. Although the comparison is somewhat inflated, it is safe to assume that a portion of the rents reported in the 1999 HVS were in effect in 1998. The HVS rent of \$720 exceeds the average rent from the RPIE data by 6%.¹

Rent by building age also varies in the HVS. The mean HVS contract rent in older pre-war apartments was \$690 (see footnote 1) which was 12% higher than the RPIE average. However, the HVS rent for units built after 1946 (\$809) was 5% lower than the 1998 RPIE average. (See sidebar) If even a portion of this "gap" between HVS and RPIE data reflect vacancy and collection losses, then it seems that older stabilized buildings continued to face much greater hardships than modern properties in the actual collection of their annual income in 1998.

In comparing RPIE and DHCR average rents, the "gap" between RPIE and DHCR rents has contracted steadily since 1991, when the average I&E rent was 15% lower than DHCR's mean registered rent. By 1994, this differential had fallen to 12%. Both 1995 and 1996 RPIE returns indicated that the gap between

CHANGES IN THE STABILIZED UNIVERSE AFFECT REPORTED AVERAGE RENTS

The HVS and the RPIE employ different units of measurement. The HVS measures data in units, while the RPIE measures data on a building-wide basis. If both the HVS and RPIE data measured the same stock, the HVS data, which consists of contract rents, would necessarily be higher than the RPIE data, which measures collected rents. Collected rents are always lower than contract rents due to vacancy and collection losses. The fact that the RPIE post-46 rent (\$849) was higher than the HVS post-46 rent (\$809) this year is anomalous and may be due to several factors.

First, the rent stabilized housing stock has undergone significant changes in the past three years. According to the HVS, the number of post-46 stabilized units has decreased by approximately 11,000 units from 1996 to 1999. Second, both the RPIE and the HVS rents are mean figures which can be affected by outliers in each sample. The post-46 HVS mean rent may be lower than expected (there was a 2% increase in mean rents from 1996 to 1999) because of an exodus of high-rent units due to vacancy and luxury decontrol. However, when the median HVS rents are compared (medians being less influenced by outliers than means), there is an 8% increase in post-46 stabilized rent from 1996 to 1999.

The fact that the HVS average rent for the post-46 stock falls below the RPIE average indicates possible shortcomings with both data sets. Since the RPIE data is drawn from building by building filings, rent and expense data from apartments which have undergone vacancy or luxury decontrol cannot be excluded, and therefore the higher rents associated with these units are part of the overall average rent. In this sense, the \$849 figure may be high, but it is nonetheless a better reflection of the economic condition of buildings containing such units. Conversely, HVS data on stabilized rents, which does not include what are presumably very high rents in deregulated apartments, does not offer a clear portrait of the economic health of buildings with a mix of regulated and deregulated units.

I&E rent and DHCR's mean stabilized rent was 10%, and in 1997, the interval contracted again to 7.5%. Current RPIE returns indicate the gap between I&E rent and DHCR's mean stabilized rent (\$740) was 8% in 1998, a slightly higher rate than was observed in last year's *Income & Expense Study*.

Despite the anomalies between the three rent indicators, the "gap" between RPIE rents and HVS/DHCR rents is a good estimate of vacancy and collection losses incurred by building owners, and the relative change in this "gap" is one way of estimating the change in such losses from year to year. Though the gap between the RPIE and DHCR average rents increased slightly, by 0.5 percentage points, the fact that the gap is still much smaller than in years past may indicate that building owners are collecting a greater portion of their legal rent rolls due to lower vacancies and fewer "preferential rents"² or non-paying tenants.

A final benchmark index to use for comparison is the RGB Rent Index, which measures the overall effect of the board's annual rent increases on contract rents each year. As the adjoining table shows, the fact that average RPIE rents increased faster longitudinally from 1997 to 1998 (5.5%) than the RGB's Rent Index (4.2%), adjusted for July-July fiscal year, suggests that stabilized building owners may still be deriving additional revenues from sources other than guideline increases. These sources may include rent increases from apartment refurbishing and building improvements, which are not accounted for in the RGB Rent Index.

RENT COLLECTIONS, DHCR CONTRACT RENTS AND THE RGB RENT INDEX GREW AT SIMILAR RATES FROM 1990-1991 TO 1997-1998

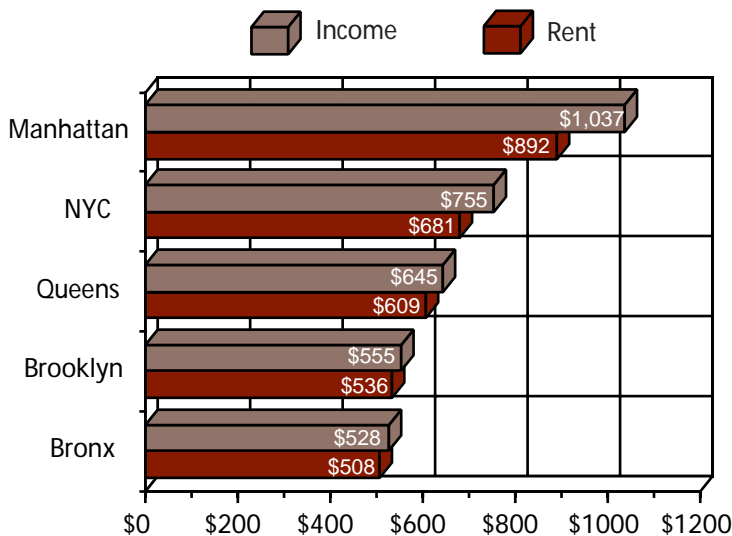
	RPIE Rents	DHCR Rents (Adjusted)	RGB "Rent" Index (Adjusted)
89-90	3.3%	6.5%	6.2%
90-91	3.4%	4.8%	4.7%
91-92	3.5%	3.5%	4.0%
92-93	3.8%	2.9%	3.3%
93-94	4.5%	2.8%	3.0%
94-95	4.3%	2.5%	2.8%
95-96	4.1%	3.6%	3.8%
96-97	5.4%	4.4%	5.3%
97-98	5.5%	4.6%*	4.2%
90-98**	44.8%	41.7%	43.9%

*This is an estimated number which will be revised when the actual figures are available.

** Percentages reflect total indexed increases from 1990 to 1998.

Stabilized Rents and Income Were Highest in Manhattan in 1998

(Average Monthly Collected Rent/Income per Dwelling Unit by Borough)



Source: NYC Department of Finance, 1999 RPIE Filings

When comparing rent and income figures, rent includes money collected for apartments, owner-occupied or related space and government subsidies. Income encompasses all revenue from rents, sales of services, such as laundry, valet and vending, and all other operating income.

The table also shows that during the recession years of the early 1990s, collected RPIE rents did not grow as quickly as legal rents or the impact of rent guidelines. This indicates that owners may have offered more preferential rents or were unable to collect the full legal amount allowed by the rent guidelines during that period. As the City's economy began to recover, rent collections grew more quickly than the guidelines or legal rents, indicating a drop in vacancy and collection losses, fewer preferential rents, and increases in rent due to building-wide improvements and individual apartment refurbishment. It is interesting to note that a longer view of the three indices that give annual figures shows broad agreement in the rate of increase from 1989-1990 to 1997-1998. DHCR adjusted rents increased 42%, RPIE rents increased 45% and the RGB Rent Index increased 44% in that period.

Many owners of stabilized buildings augment 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 \$755 per rent stabilized unit in 1998, with pre-war buildings earning \$684 per unit and those in post-war properties earning \$940 per unit. These figures encompass rent from stabilized apartments as well as the sale of services (e.g. laundry, garages/parking) and commercial income. Such proceeds accounted for nearly 10% of the total income earned by building owners in 1998, the same as the rate observed for 1997. Manhattan owners particularly benefit from commercial income, with 14% of their total revenues coming from commercial units and services. The respective figures for the other boroughs were 6% in Queens, 4% in the Bronx and 3% in Brooklyn. These proportions of commercial and service income were slightly higher in Manhattan and Queens and lower in the Bronx and Brooklyn than the previous year. The chart shows the average rent and income collected in 1998 by borough and for the City as a whole. (See Appendix 3)

Operating Costs

Rent stabilized apartment buildings incur considerable expenses in the course of their operation. RPIE filings include data on eight categories of maintenance costs.

In contrast to revenues, however, 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 sample of residential buildings analyzed below. Thus, the operating costs reported are comparatively high because they include maintenance costs for commercial space.

The average monthly operating cost for stabilized units was \$459 in 1998. Costs were lower in units situated in pre-war buildings (\$430), and substantially higher in the post-war sector (\$536). Geographically, costs were lowest in Brooklyn (\$364) and highest in Manhattan (\$586). The chart details average monthly expenses by cost category and building age for 1998.

In 1992, Department of Finance and RGB staff tested RPIE expense data for accuracy. Initial examinations found that most "miscellaneous" costs were actually administrative or maintenance costs, while 15% were not valid business expenses. Further audits on the revenues and expenses of forty-six rent stabilized properties discovered that O&M costs stated in RPIE filings were generally exaggerated by 8%. Costs tended to be less accurate in small (11-19 units) properties and most precise for large (100+ units) buildings. However, these results are somewhat inconclusive since several owners of large stabilized properties refused to cooperate with the Department of Finance's assessors. Adjustment of 1998 RPIE data by the results of the 1992 audits reduces the monthly average O&M cost for stabilized units from \$459 to \$422.³

Just as buildings without commercial space typically generate less revenue than stabilized properties with stores, operating expenses in these buildings were generally lower than in buildings with a mixture of uses. Average audited O&M costs for buildings without commercial units were \$390 per month, \$32 lower than the audit-adjusted average (\$422) for all buildings in 1998. As in last year's *Income & Expense Study*, most of the difference in costs between the two types of properties stemmed from taxes, miscellaneous and administration expenses that were respectively 16%, 10%, and 7% lower on average for buildings without commercial space than for all stabilized properties.

Components of Operating Costs

In 1998, nearly three-fourths of total expenses in stabilized buildings were comprised of taxes, maintenance, labor and administration costs. Older (pre-47) buildings spent proportionately more on average on maintenance, fuel and insurance costs, while consequently spending less on taxes and labor. Conversely, newer (post-46) buildings spent relatively more money on taxes and labor and less on maintenance, fuel and insurance. Less variation was observed within the other three expense categories (utilities, administration and miscellaneous costs) among buildings of different ages. (See Appendix 5).

Building size also affected the distribution of costs in rent stabilized buildings. As in previous years, taxes, maintenance, labor and administration costs dominated total operating costs in buildings of various sizes in 1998. Labor costs continued to be particularly associated with size, comprising much larger shares of total O&M costs in larger buildings, probably due to the concentration of large, modern (post-46) stabilized buildings in Manhattan, which tend to employ doormen. In contrast, fuel, insurance and maintenance (post-war only) shares decreased with larger buildings in 1998, probably due to efficiencies of scale realized by larger properties, particularly those with 100 or more units. (See Appendix 5)

"Distressed" Buildings

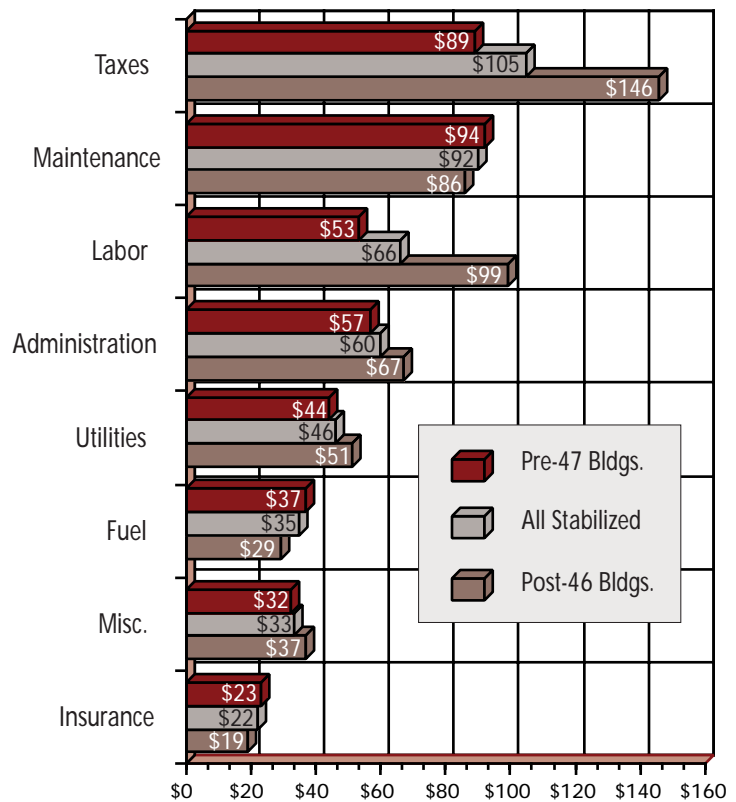
Among the properties that filed 1998 RPIE forms, 808 buildings, or 7% of the cross-sectional sample, had O&M costs in excess of gross income. Only 42 of these buildings, or 5%, were built after 1946. The proportion of such "distressed" buildings again comprised a smaller percentage of the cross-sectional sample than in the previous year (8%).

Buildings with expenses greater than revenues in 1998 suffered from both

abnormally high expenses, (118% of the 1998 all-building average), and low rents and income, (respectively only 64% and 62% of the all-building average, a slightly higher proportion than the figures reported in 1997). Most of the variance in unadjusted costs between these and other stabilized buildings was found in utilities, insurance, administration, fuel, maintenance, and "miscellaneous" categories, which in these "distressed" buildings were respectively 111%, 125%, 128%, 131%, 143% and 218% of the stabilized average. Not surprisingly, these buildings also paid less property taxes (72% of the all-building average) and had lower labor expenses (91% of the all stabilized building average) than other stabilized

Taxes Are Largest Expense in 1998

(Average Monthly Expense per Dwelling Unit per Month)



Source: NYC Dept. of Finance, 1999 RPIE Filings

structures. Appendix 6 shows the distribution of "distressed" buildings by age, size and location.

Net Operating Income and Operating Cost Ratios

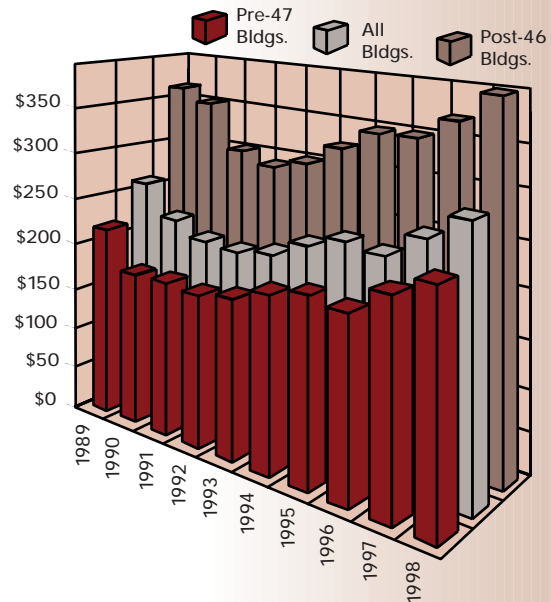
In most apartment buildings, revenues exceed operating costs, yielding funds that can be used for mortgage payments, improvements and, after local, state and federal taxes are paid, profit. The amount of income remaining after maintenance expenses are paid is typically referred to as "Net Operating Income" (NOI). While debt service and income taxes then determine the ultimate profitability of a property, NOI is a good indicator of its basic financial condition.

This is the fourth year that RGB staff computed NOI for buildings filing RPIE forms. On average, apartments in rent stabilized buildings generated \$295 of net income per month in 1998, with units in the pre-war stock earning less (\$254 per month) than those in post-war properties (\$404 per month). NOI tended to be much higher for stabilized buildings in Manhattan (\$451) than for those in the outer boroughs. Average NOI in "all-residential" properties was \$253 per unit per month in 1998, 14% lower than the norm for all stabilized buildings. (See Appendix 4)

What these figures tell us is that as the revenue available after payment of operating costs, NOI is the money owners have for financing their buildings, making improvements, and for pre income tax profits. NOI does not say anything about the ultimate profitability of a particular property, which depends on mortgage payments and income taxation, data that is not included in this analysis. That said, multiplying the average monthly NOI of \$295 per stabilized unit by the typical size of buildings in this year's cross-sectional sample (46 units), yields an estimated mean annual NOI figure of roughly \$163,000 for a hypothetical 'average owner' in 1998.

Traditionally, the RGB has used "cost-to-income ratios" to evaluate the profitability of New York's stabilized housing, presuming that buildings are better off by spending a lower percentage of revenue on expenses. Over the last ten years, the proportion of total income spent on audited operating costs has

After Inflation, NOI Surpasses Levels Last Seen in the Late 1980's (Average Monthly Net Operating Income per Apartment in Constant 1998 Dollars)



AVERAGE MONTHLY NOI PER APARTMENT (CONSTANT 1998 DOLLARS)

	All	Post-46	Pre-47
1989	\$262	\$362	\$221
1990	\$228	\$350	\$178
1991	\$212	\$302	\$180
1992	\$209	\$290	\$178
1993	\$216	\$300	\$184
1994	\$234	\$322	\$200
1995	\$248	\$344	\$211
1996	\$244	\$345	\$205
1997	\$270	\$366	\$233
1998	\$295	\$404	\$254

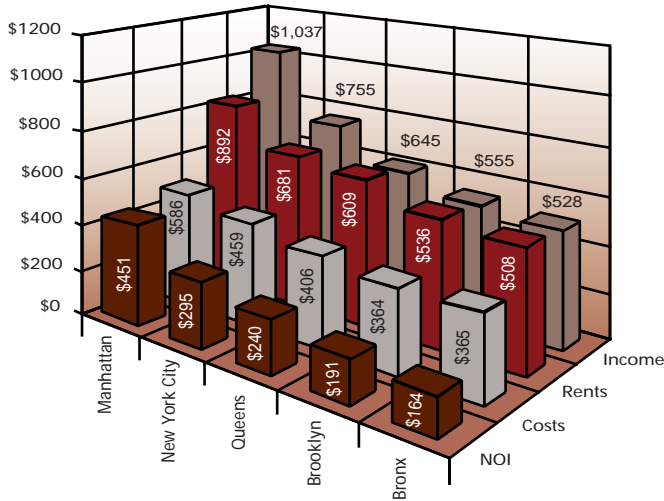
1998 COST-TO-INCOME AND COST-TO-RENT RATIOS ARE LOWEST IN THIS DECADE

	'91	'92	'93	'94	'95	'96	'97	98
O&M to Income	62.9%	63.4%	62.5%	60.7%	59.5%	60.1%	58.2%	55.9%
O&M to Rent	69.6%	70.2%	69.3%	67.5%	66.2%	66.8%	64.4%	61.9%

Note: Ratios use audited costs.

Stabilized Rents were Highest in Manhattan During 1998

(Average Monthly Income, Rent, Operating Cost, and Net Operating Income per Dwelling Unit)



Source: NYC Dept. of Finance, 1999 RPIE Filings

both risen and fallen in stabilized buildings. From a peak of 63.4% in 1992, following several years of declines and rises, the cost-to-income ratio was 55.9% in 1998, the lowest average ratio in eleven years. As operating costs have consumed less revenue in recent years, inflation-adjusted NOI in 1998 is 13% more than the average found in 1989.

These NOI figures suggest that New York's stabilized housing market has emerged from the deep recession of the early 1990's and is now experiencing better financial conditions. During the stagnant economic period of the early 1990's, unemployment and collection losses rose in the City, limiting owners' ability to offset rising operating costs by raising rents. This trend started reversing around 1993, when the City's economy improved to the point where building owners could increase rents (and revenues) faster than costs, which remained stable until 1996. The 1996 RPIE data showed that rent stabilized properties experienced leaps in several cost categories, reversing the three-year trend of stable and moderate cost growth. Rent and income collections strongly outpaced costs in 1997 and 1998, however, and will be discussed in the longitudinal section of the study. The result of these conditions is a robust increase in average monthly inflation-adjusted

NOI of \$25 from the previous year (\$270 to \$295). For a detailed view of NOI trends, the table shows average monthly NOI by building age from 1989 to 1998 in constant 1998 dollars. After seven years in which NOI did not reach levels seen in the late 1980's, both 1997 and 1998 show real term improvement in NOI levels, for the first time in the decade.

Longitudinal Study

Rents and Income

As the local economy continued its upward trend, average rent collections in stabilized buildings rose by 5.5% in 1998, which was nearly identical to the increase observed during 1997 (5.4%). The increases seen in 1998 are most likely propelled by reductions in vacancy and collection losses, which allowed landlords to keep more of their rent rolls. Rising investment in property improvements may also be boosting rent collections since the costs of renovating building-wide systems and individual apartments can be added to stabilized rents. The vacancy increase implemented by New York State in June of 1997 (18%-20%), under the Rent Regulation Reform Act of 1997, also contributed to the strong increase seen in rents from 1997 to 1998.

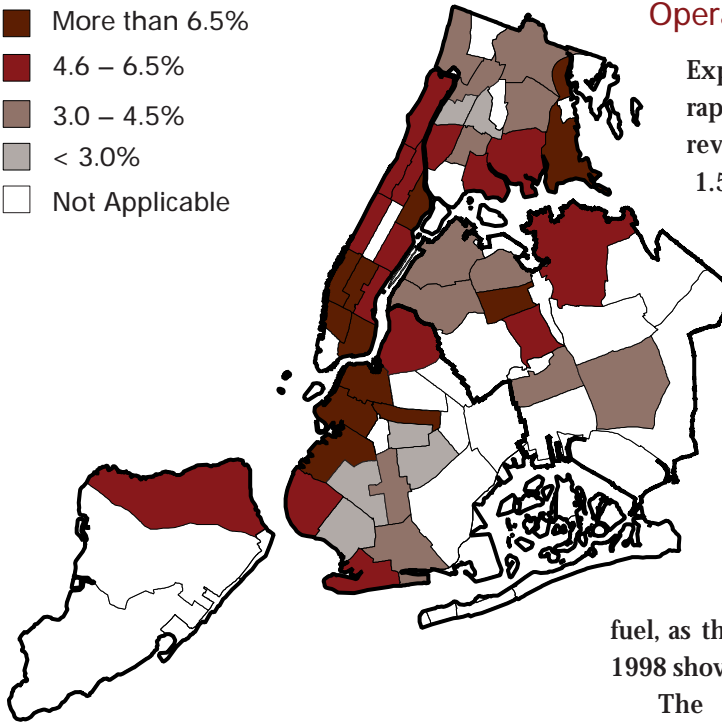
In a departure from last year, rent collections in older (pre-47) buildings grew at a slower pace (5.4%) than those in newer (post-46) properties (5.8%). Rent collections increased by 6.8%, 5.4%, and 5.0% for small (11-19 unit), medium (20-99 unit), and large (100+ unit) buildings respectively. Once again, small buildings appear to have the highest gains in rent collections, gaining the highest rent growth of all the size categories for five years in a row.

The total income collected in rent stabilized buildings, comprising apartment rents, commercial rents, and sales of services, increased by 5.3% from 1997 to 1998, an increase of one-tenth of a percentage point (0.1) over the rate observed in the previous year (5.2%). Revenues rose at similar rates in pre-war buildings (5.4%) and post-war buildings (5.2%). In contrast to last year's findings, all three size categories saw similar income growth. Medium buildings experienced a 5.3% growth in income, followed by small and large buildings which both had increases of 5.1% in collected income. (See Appendix 8)

Stabilized Rents Rose Highest in Manhattan and Brooklyn in 1998

(Change in Collected Rents 1997-98)

- More than 6.5%
- 4.6 – 6.5%
- 3.0 – 4.5%
- < 3.0%
- Not Applicable



Note: Fifteen Community Districts are "Not Applicable" because they did not contain enough stabilized buildings to calculate reliable statistics. Areas shaded white may also denote non-residential spaces, such as parks, bodies of water and airports.

Source: NYC Dept. of Finance, 1999 RPIE Filings

Rent collections in stabilized properties rose 6.5% in the borough of Manhattan as a whole from 1997 to 1998. At the neighborhood level, rent increases in Manhattan's "Core," the area below East 96th and West 110th Streets, were all above the City and borough average. In the northern portion of Manhattan, rent growth was more moderate, with rent increases in two neighborhoods, Washington Heights/Inwood and Morningside Heights/Hamilton, below the City-wide average.

Rents in the boroughs of Queens (4.6%), the Bronx (3.9%) and Brooklyn (3.8%) increased less rapidly than in the borough of Manhattan (6.5%) from 1997 to 1998. As the accompanying rent collection growth map shows, the City-wide average (5.5%) was

brought up by the rapid rent growth that was concentrated in Manhattan, while areas in the outer boroughs experienced more moderate and varied rent collection growth.

Operating Costs

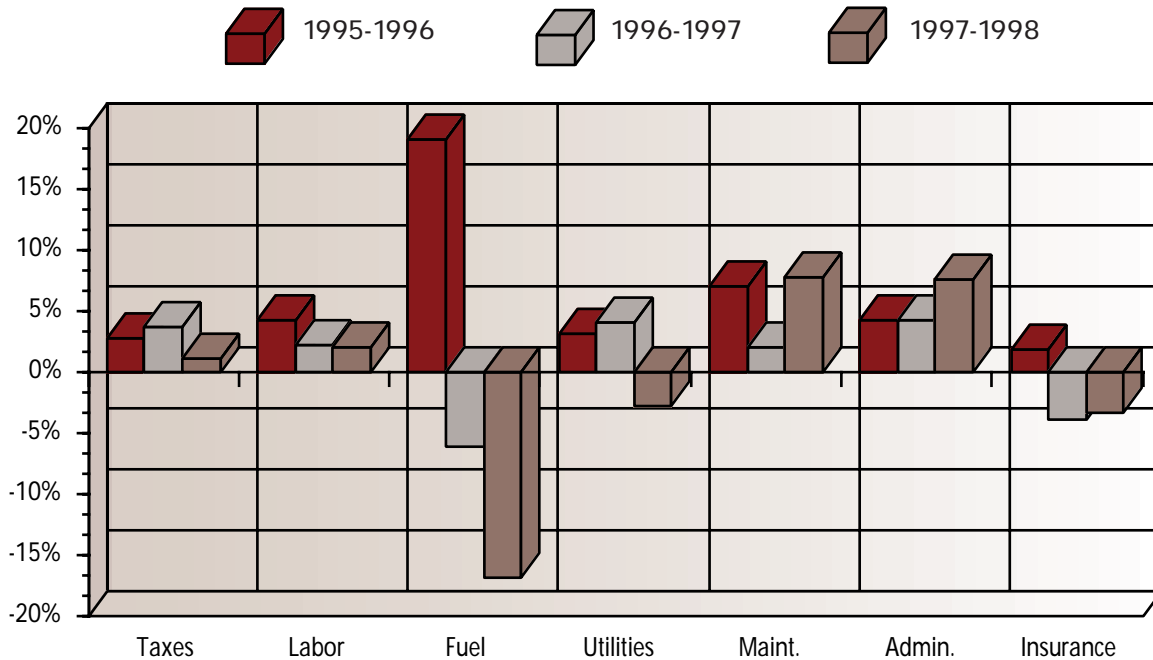
Expenses in stabilized buildings grew less rapidly (1.5%) than increases in both rents and revenues from 1997 to 1998. This year, the 1.5% increase in operating expenses was the lowest growth rate recorded for costs in the nine years the RGB has been collecting longitudinal data in the I&E study.⁴ Costs rose faster in pre-war buildings (1.9%) than in modern properties (0.9%) in 1998. While the I&E studies have reflected that rent and income revenues tend to rise at similar rates to one another, operating cost increases are much more variable, often the result of volatile changes in the cost of fuel, as the chart of expense growth from 1995 to 1998 shows.

The decline from the previous year's all buildings' expense growth (1.9%) was attributable to actual drops in fuel, insurance and utility costs, and low rates of increase in taxes and labor expenses. The expense categories of maintenance, administration and miscellaneous costs rose more swiftly in stabilized buildings than they did in the previous year. Similar to last year, size influenced cost growth as expenses rose by 3.1%, 1.5%, and 1.1% respectively in small, medium, and large buildings.

While overall cost growth was relatively low in 1998, some expenses contributed to the low rate of increase more than others. Fuel costs declined sharply, by 17%, the largest drop since 1991, insurance rates fell by 3.4% and utilities declined by 2.9%. Other expenses contributing to the average increase included the modest gains in taxes (1.0%) and labor costs (2.0%). These declines and modest gains were offset by administration, maintenance and miscellaneous costs which grew by 7.6%, 7.9% and 9.2%, respectively. Had it not been for the large decrease in fuel costs, there would have been a significant increase in overall costs.

Fuel Costs Show the Most Volatility from 1995-1998

(Change in Operating Cost Components, by Year, 1995-1998)



Source: NYC Department of Finance, 1997, 98 & 99 RPIE Filings

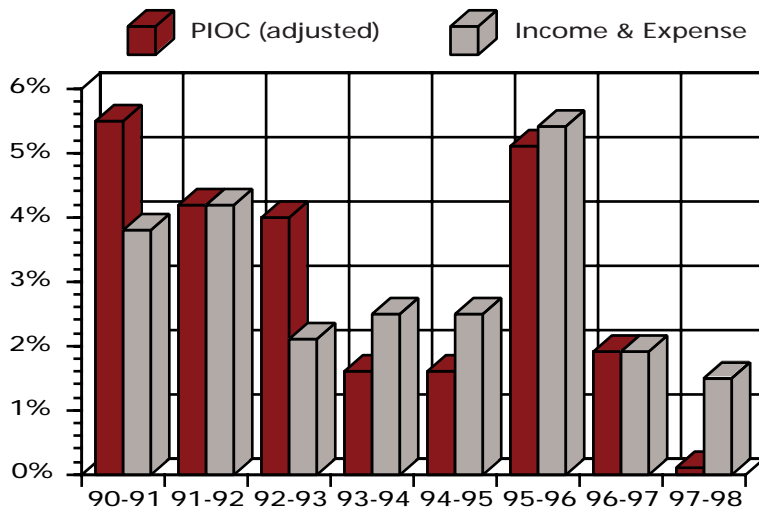
The RPIE and the RGB's long-running in-house survey, the PIOC, each provide a form of independent verification for the expense findings in the other. However, comparison of I&E and PIOC data is somewhat distorted due to differences in the way each instrument defines costs and gathers data about them. For example, there is a difference between when expenses are incurred and actually paid by owners as reported in the RPIE, versus the cost quotes obtained from vendors for specific periods as surveyed in the PIOC. In addition, the PIOC primarily measures prices on an April-to-April basis, while most RPIE statements filed by landlords are based on the calendar year. To compare the two, weighted averages of each must be calculated, at the price of some accuracy.

Over the past several years, growth in PIOC-measured costs has consistently differed from expense increases reported in RPIE data. Since the beginning of the decade, the PIOC has grown faster in periods of economic downturn, and the RPIE has grown faster in recovery. While the "gap" between the two indices has been steadily narrowing since 1993, this year there was a

difference of 1.4 percentage points between the two indices, the largest difference since 1992-93. This year, as the graph shows, the PIOC (adjusted for comparison purposes) showed barely any increase in expenses (0.1%) while the RPIE showed overall growth in expenses of 1.5%. Closer examination reveals that the PIOC and RPIE reported similar changes in the cost of fuel, taxes and labor, while the RPIE saw greater increases in the costs of maintenance and administration, and a decrease in the cost of utilities which could account for the difference between the two indices in 1998.

The PIOC, vital to the RGB as an indicator of current costs, may be most robust when measuring cost increase trends as New York's rent stabilized housing market emerges from recession. This is because the PIOC is strong at tracking costs during economic upswings, when all types of costs are generally increasing, and when accelerating revenue growth induces fewer owners to cut back on maintenance services and other elective costs. The longitudinal RPIE data, on the other hand, is a highly reliable measure of cost trends over both the short and long term because

In 1998, the I&E Found Increases in Operating Costs of 1.5%, while the PIOC was much lower



Note: The PIOC increase is adjusted from the April-to-April to the July-to-July fiscal year.

Source: NYC Dept. of Finance, 1999 RPIE Filings, PIOC 1990-98

the *I&E Study* relies on actual empirical data supplied by a large number of the City's stabilized owners. Unfortunately, due to filing periods and processing time, RPIE data is not available to the RGB for more than a year after the calendar reporting year has ended.

Overall, from 1990-91 to 1997-98, cumulative growth in the two indices seem to confirm the accuracy of one another as the PIOC registered cost growth of 26.5% in stabilized buildings compared to a 26% increase reported in RPIE filings. However, aggregate increases in fuel, maintenance and insurance costs do vary considerably between the two indices over the last eight years.

Operating Cost Ratios

The proportion of gross income spent on unaudited expenses declined by slightly more than two percentage points between 1997 and 1998. A similar drop was observed in the amount of income spent on audited expenses and the proportion of rent used to pay audited costs. These drops in the O&M Expense-to-Income and the O&M Expense-to-Rent ratios comprise the fifth time in six years that the proportion of income or rent spent on expenses decreased. Both ratios decreased each year from 1993-95, then increased slightly in 1996, primarily because of sharply increased fuel expenses that year. The declines in the operating cost ratios of more than two percentage points are also the largest drops seen in these ratios in the nine years that longitudinal data has been collected.

"Distressed" Buildings

Roughly 6% of the buildings in this year's longitudinal sample, (627), faced costs that exceeded revenues, slightly more than one percentage point lower than the rate of distressed buildings observed last year. Only 36 of these buildings were built after 1946. The fundamental conditions besetting these buildings did not change. Such properties are burdened by low rents, lack of commercial income, and high operating expenses.

Net Operating Income

Since revenues grew much more rapidly than operating costs in stabilized buildings during 1998, it is not surprising that Citywide NOI increased over the year by an average of 11.8%, a slight increase from 1997's figure (11.4%), and a significant increase over 1996 (2.3%). The 11.8% increase in average NOI from 1997-98 is the highest rate of NOI growth found in the nine years for which longitudinal data has been collected by the RGB.

In a departure from the previous year, NOI grew at nearly the same pace in the pre-war stock (11.9%) as it did in post-war properties (11.6%). Earnings that remained after operating and maintenance expenses were paid rose the most from 1997-98 in medium-sized (20-99 units) and large (100 or more units) buildings. These properties enjoyed NOI growth of 12.5% in medium-sized structures and 10.3% in large buildings. Small buildings with 11-19 units experienced a strong average increase in NOI of 8.8%, although this rate is below the NOI increase rate for the City as a whole. (See Appendix 9)

Growth trends in pre-income tax and pre-debt service gains to owners were highly varied at the neighborhood level across the City from 1997-98. NOI rose strongly throughout most of the borough of Manhattan at an average rate of 12.4%, followed by the Bronx at 11.3%, Brooklyn with 10.8% and Queens with 8.0%. The accompanying map shows that NOI

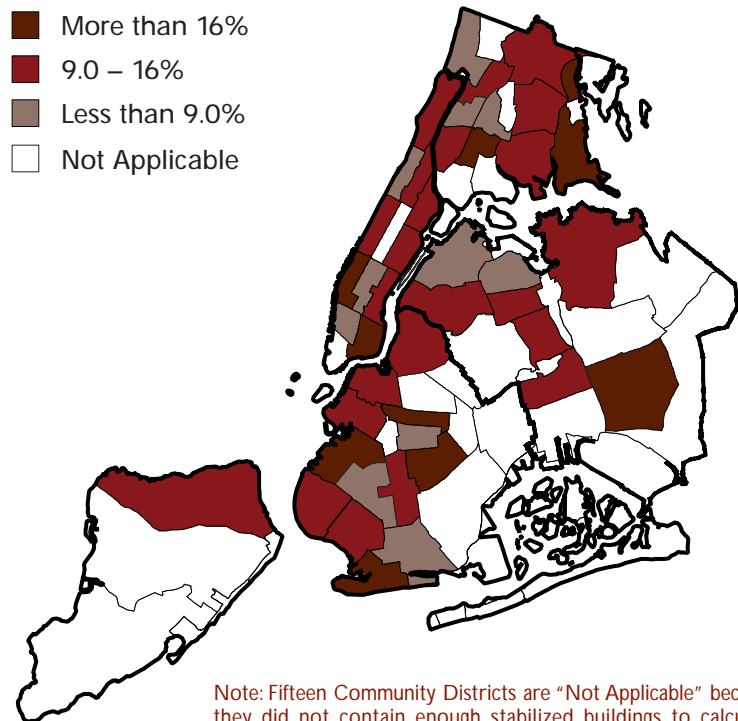
growth was varied but generally strong across the City from 1997-98.

As the table on the next page illustrates, 1997-1998 was a record year in all respects: highest rent and income increases (5.5% and 5.3%, respectively), the lowest increase in operating expenses (1.5%), and consequently, the highest growth in NOI at 11.8%.

Conclusions

The RPIE records show that the overall financial condition of New York City's rent stabilized properties is continuing on the path of improvement that it has enjoyed for the past several years. In 1998, owners of rent stabilized buildings generally had a larger amount of inflation-adjusted income after operating and maintenance expenses were paid. This leaves more funds for mortgages, building improvements, and profit than they netted in the previous year.

NOI Grew fastest in Manhattan and Brooklyn's Stabilized Buildings During 1998



Note: Fifteen Community Districts are "Not Applicable" because they did not contain enough stabilized buildings to calculate reliable statistics. Areas shaded white may also denote non-residential spaces, such as parks, bodies of water and airports.

Source: NYC Dept. of Finance, 1999 RPIE Filings

Longitudinal Growth Rates in All I&E Categories are Records (highest or lowest) from 1997-98

	Avg. Rent Growth	Avg. Income Growth	Avg. Cost Growth	Avg. NOI Growth
89-90*	3.3%	3.7%	7.1%	-1.8%
90-91	3.4%	3.2%	3.4%	2.8%
91-92	3.5%	3.1%	4.2%	1.2%
92-93	3.8%	3.4%	2.1%	6.3%
93-94	4.5%	4.7%	2.5%	9.3%
94-95	4.3%	4.4%	2.5%	9.0%
95-96	4.1%	4.3%	5.4%	2.3%
96-97	5.4%	5.2%	1.9%	11.4%
97-98	5.5%	5.3%	1.5%	11.8%

Source: NYC Department of Finance, 1990-1999 RPIE Filings

* See footnote 4.

Methodology

The information in this report was generated from summaries of raw data from RPIE forms filed with the Department of Finance in 1998 by owners of apartment buildings with eleven or more dwellings. The data in these forms, which reflects financial conditions in stabilized buildings for the year 1998, was computerized in late 1999, and made available to RGB research staff early in 2000.

Two types of summarized data, cross-sectional and longitudinal, were obtained for stabilized buildings. Cross-sectional data, which provides a "snapshot" view, comes from properties that filed RPIE forms in 1999. This data is used to compute average rents, operating costs, etc. that are typical of the year 1998. Longitudinal data, which provides a direct comparison of identical elements over time, encompasses properties that filed RPIE forms in both 1998 and 1999. Only buildings with an actual assessed value of more than \$80,000 were included in the cross-sectional sample and the longitudinal sample for both years. The longitudinal data describes changing conditions in average rents, operating costs, etc. by comparing matched forms from the same buildings over two years. Analysis of filing dates shows that RPIE forms reflect conditions around July of the previous calendar year. Thus, cross-sectional data in this report measures

conditions in effect throughout 1998, while longitudinal data measures changes in conditions that occurred from 1997 to 1998.

This year, 12,383 rent stabilized apartment buildings were analyzed in the cross-sectional study, and 10,061 stabilized properties were examined in the longitudinal study. Buildings were sampled by matching a list of properties registered with the New York State Division of Housing and Community Renewal (DHCR) in 1998 with buildings that filed a 1998 RPIE statement (or 1997 and 1998 statements for the longitudinal sample). The number of buildings in both the cross sectional and the longitudinal sample increased from the previous year. The cross-sectional sample increased by 931 buildings (8%) and the longitudinal sample saw an increase of 281 buildings (3%). After two years of decreases in sample sizes, this increase may mean that more building owners are complying with regulations requiring filing. Also, the building list used to gather the sample was updated which may also account for the increased sample size.

Once drawn, preliminary building samples were "cleansed" by rejecting properties that met the following criteria:

- They contained fewer than 11 units. Owners of buildings with fewer than 11 apartments (without commercial units) are not required to file RPIE forms;

- Owners did not file a 1998 RPIE form for the cross-sectional study, or a 1997 and a 1998 RPIE form for the longitudinal study;
- No unit count could be found in RPIE filings;
- No "apartment rent" was recorded on the RPIE forms. In these cases, forms were improperly completed or the building was vacant.

Three additional methods were used to weed out inaccurate building information that could have distorted the final results:

- In early I&E studies, the Department of Finance used the total number of units from the RPAD (assessed value) file to classify buildings by size and location. Board researchers found that sometimes the unit counts on RPIE forms were different than those on the RPAD file. It was decided that residential counts from the RPIE form were more reliable.
- Average monthly rents for each building were compared to rent intervals for each borough, computed from the 1998 Recent Movers Survey to control data quality since rent data from the 1996 HVS is out of date and the 1999 HVS data was not yet available when the Department of Finance culled the data. Properties with average rents outside of the ranges were removed from all samples. This year, 185 buildings were expelled from both samples for this reason. Most (122) of these buildings were expelled for having average rents below \$100 per month, although 63 buildings with average rents in excess of upper limits calculated individually for each borough were also removed. Such culling is critical since strongly aberrational data may reflect entry errors such as adding an extra digit, and thus can impair the overall accuracy of the analysis.
- Buildings in which operating costs exceeded income by more than 300% were excluded from both the cross-sectional and longitudinal samples. Three properties were excluded from each sample for this reason.

As in prior studies, after compiling both samples, the Department of Finance categorized sample data

reflecting particular types of buildings throughout the five boroughs (such as structures with 20-99 units built in Brooklyn before 1947). Staten Island is not included in most data comparisons between boroughs because it contains too few stabilized buildings in most size and age categories to calculate reliable statistics. All data is weighted using HVS information to reflect the distribution of stabilized buildings in New York City. □

Endnotes

1. Mean contract rents for 1998 were computed using the 1999 New York City Housing and Vacancy Survey (HVS). RPIE data includes information on some rent controlled units. In order to arrive at a rent figure comparable to the I&E data, controlled and stabilized units from the 1999 HVS were combined to compute an average rent for all regulated units.
2. Preferential rents refer to actual rent paid which is lower than the "legal rent," or the amount the owner is entitled to charge. Owners often offer preferential rents when the current market cannot bear the legal rent.
3. The average monthly operating cost is deflated by 8% to arrive at the audited figure of \$422.
4. Even though percent changes were calculated for 1989-1990, these figures cannot be compared to later years because only 382 buildings were included in the longitudinal sample. Comparisons are best made between 1990-1991 and later years when the sample increased to approximately 10,000 buildings due to computerization of RPIE data.

Appendix

1. CROSS-SECTIONAL INCOME AND EXPENSE STUDY: ESTIMATED AVERAGE OPERATING & MAINTENANCE COST (1998) PER APARTMENT PER MONTH BY BUILDING SIZE AND LOCATION, STRUCTURES BUILT BEFORE 1947

	<u>Taxes</u>	<u>Labor</u>	<u>Fuel</u>	<u>Water/Sewer</u>	<u>Light & Power</u>	<u>Maint.</u>	<u>Admin.</u>	<u>Insurance</u>	<u>Misc.</u>	<u>Total</u>
Citywide	\$89	\$53	\$37	\$28	\$16	\$94	\$57	\$23	\$32	\$430
11-19 units	\$115	\$30	\$47	\$30	\$18	\$104	\$63	\$30	\$39	\$476
20-99 units	\$80	\$49	\$37	\$28	\$15	\$91	\$54	\$23	\$31	\$408
100+ units	\$118	\$108	\$30	\$27	\$26	\$108	\$68	\$17	\$29	\$530
Bronx	\$48	\$41	\$39	\$28	\$14	\$89	\$48	\$24	\$27	\$357
11-19 units	\$52	\$37	\$57	\$28	\$18	\$107	\$48	\$34	\$43	\$422
20-99 units	\$49	\$38	\$37	\$28	\$13	\$87	\$46	\$24	\$27	\$350
100+ units	\$31	\$86	\$42	\$21	\$16	\$83	\$71	\$19	\$15	\$384
Brooklyn	\$65	\$35	\$39	\$26	\$14	\$78	\$44	\$22	\$26	\$349
11-19 units	\$66	\$21	\$54	\$28	\$14	\$91	\$47	\$28	\$34	\$382
20-99 units	\$63	\$35	\$38	\$26	\$14	\$75	\$43	\$22	\$25	\$342
100+ units	\$70	\$55	\$32	\$25	\$12	\$83	\$46	\$17	\$23	\$364
Manhattan	\$127	\$72	\$36	\$29	\$16	\$104	\$67	\$24	\$37	\$513
11-19 units	\$160	\$34	\$42	\$31	\$22	\$113	\$81	\$32	\$43	\$558
20-99 units	\$112	\$66	\$36	\$29	\$17	\$106	\$68	\$24	\$39	\$498
100+ units	\$164	\$138	\$26	\$28	\$36	\$128	\$81	\$16	\$35	\$652
Queens	\$79	\$40	\$36	\$28	\$12	\$76	\$45	\$21	\$24	\$362
11-19 units	\$82	\$19	\$48	\$28	\$11	\$80	\$33	\$24	\$23	\$347
20-99 units	\$78	\$36	\$35	\$28	\$12	\$74	\$47	\$21	\$25	\$357
100+ units	\$79	\$82	\$30	\$29	\$11	\$84	\$43	\$21	\$22	\$402
Staten Island*	-	-	-	-	-	-	-	-	-	-
20+ units										

* The number of pre - 47 buildings in Staten Island was too small to calculate reliable statistics. The sum of the lines may not equal the total due to rounding. Totals in this table may not match those in Table 3 due to rounding. Data in this table are NOT adjusted for the results of the 1992 Department of Finance audit on I&E reported operating costs. The category "Utilities" used in the I & E report is the sum of "Water & Sewer" and "Light & Power".

Source: NYC Department of Finance, RPIE Filings.

2. CROSS-SECTIONAL INCOME AND EXPENSE STUDY: ESTIMATED AVERAGE OPERATING & MAINTENANCE COST (1998) PER APARTMENT PER MONTH BY BUILDING SIZE AND LOCATION, STRUCTURES BUILT AFTER 1946

	<u>Taxes</u>	<u>Labor</u>	<u>Fuel</u>	<u>Water/Sewer</u>	<u>Light & Power</u>	<u>Maint.</u>	<u>Admin.</u>	<u>Insurance</u>	<u>Misc.</u>	<u>Total</u>
Citywide	\$146	\$99	\$29	\$27	\$25	\$86	\$67	\$19	\$37	\$536
11-19 units	\$182	\$28	\$36	\$27	\$37	\$110	\$97	\$29	\$48	\$595
20-99 units	\$103	\$60	\$31	\$27	\$20	\$76	\$52	\$21	\$30	\$420
100+ units	\$190	\$144	\$26	\$26	\$29	\$95	\$82	\$16	\$43	\$651
Bronx	\$88	\$60	\$29	\$25	\$21	\$73	\$45	\$22	\$34	\$398
11-19 units	-	-	-	-	-	-	-	-	-	-
20-99 units	\$80	\$48	\$30	\$26	\$20	\$75	\$46	\$23	\$34	\$383
100+ units	-	-	-	-	-	-	-	-	-	-
Brooklyn	\$92	\$68	\$31	\$26	\$20	\$79	\$57	\$21	\$30	\$424
11-19 units	-	-	-	-	-	-	-	-	-	-
20-99 units	\$89	\$57	\$33	\$26	\$19	\$77	\$52	\$22	\$29	\$403
100+ units	\$91	\$102	\$26	\$27	\$20	\$82	\$67	\$17	\$30	\$463
Manhattan	\$260	\$174	\$27	\$27	\$33	\$110	\$101	\$16	\$50	\$797
11-19 units	\$326	\$34	\$38	\$31	\$74	\$166	\$208	\$31	\$76	\$983
20-99 units	\$192	\$98	\$26	\$26	\$23	\$93	\$75	\$20	\$34	\$588
100+ units	\$275	\$191	\$27	\$27	\$35	\$113	\$106	\$15	\$54	\$843
Queens	\$107	\$72	\$30	\$27	\$22	\$75	\$54	\$19	\$31	\$437
11-19 units	\$130	\$38	\$35	\$28	\$18	\$80	\$42	\$25	\$41	\$437
20-99 units	\$101	\$57	\$32	\$28	\$21	\$72	\$48	\$20	\$29	\$407
100+ units	\$110	\$100	\$26	\$26	\$23	\$78	\$60	\$16	\$32	\$471
St. Island	\$104	\$47	\$33	\$23	\$22	\$83	\$63	\$22	\$30	\$428
20+ units	\$89	\$51	\$32	\$22	\$19	\$78	\$56	\$21	\$26	\$394

* The number of rent stabilized units located in buildings with fewer than 20 units in Brooklyn, the Bronx and Staten Island, as well as buildings with 100+ units in the Bronx, were too small to calculate reliable statistics.

The sum of the lines may not equal the total due to rounding. Totals in this table may not match those in Table 3 due to rounding. Data in this table are NOT adjusted for the results of the 1992 Department of Finance audit on I&E reported operating costs.

Source: NYC Department of Finance, RPIE Filings.

3. CROSS-SECTIONAL INCOME AND EXPENSE STUDY, ESTIMATED AVERAGE RENT AND INCOME (1998) PER APARTMENT PER MONTH BY BUILDING SIZE AND LOCATION

	<u>Post-46</u>			<u>Pre-47</u>			<u>All</u>		
	<u>Rent</u>	<u>Income</u>	<u>Costs</u>	<u>Rent</u>	<u>Income</u>	<u>Costs</u>	<u>Rent</u>	<u>Income</u>	<u>Costs</u>
Citywide	\$849	\$940	\$536	\$617	\$684	\$430	\$681	\$755	\$459
11-19 units	\$659	\$952	\$595	\$614	\$743	\$476	\$618	\$761	\$486
20-99 units	\$634	\$671	\$420	\$587	\$641	\$408	\$597	\$648	\$411
100+ units	\$1,092	\$1,218	\$651	\$818	\$904	\$530	\$989	\$1,100	\$606
Bronx	\$586	\$618	\$398	\$491	\$509	\$357	\$508	\$528	\$365
11-19 units	-	-	-	\$478	\$520	\$422	\$479	\$534	\$425
20-99 units	\$563	\$581	\$383	\$489	\$505	\$350	\$499	\$516	\$354
100+ units	-	-	-	\$536	\$550	\$384	\$583	\$605	\$395
Brooklyn	\$605	\$636	\$424	\$518	\$534	\$349	\$536	\$555	\$364
11-19 units	-	-	-	\$513	\$548	\$382	\$526	\$568	\$387
20-99 units	\$591	\$615	\$403	\$514	\$527	\$342	\$532	\$548	\$356
100+ units	\$638	\$660	\$463	\$551	\$570	\$364	\$590	\$611	\$409
Manhattan	\$1,415	\$1,613	\$797	\$753	\$885	\$530	\$892	\$1,037	\$586
11-19 units	\$830	\$1,622	\$983	\$713	\$930	\$558	\$715	\$942	\$566
20-99 units	\$978	\$1,105	\$588	\$703	\$814	\$498	\$721	\$833	\$504
100+ units	\$1,515	\$1,727	\$843	\$1,019	\$1,161	\$652	\$1,319	\$1,503	\$768
Queens	\$637	\$685	\$437	\$570	\$591	\$362	\$609	\$645	\$406
11-19 units	\$589	\$628	\$437	\$528	\$551	\$347	\$545	\$572	\$371
20-99 units	\$609	\$642	\$407	\$566	\$587	\$357	\$591	\$620	\$387
100+ units	\$681	\$729	\$471	\$643	\$657	\$402	\$675	\$717	\$459
St. Island	\$615	\$672	\$428	-	-	-	\$615	\$672	\$428

City and borough totals are weighted, while figures for building size categories are unweighted. All expense data is unaudited. The number of Post-1946 buildings with 11-19 units in the Bronx and Brooklyn, and buildings with 100+ units in the Bronx, were too small to calculate reliable statistics as was the number of Pre-47 bldgs in Staten Island.

Source: NYC Department of Finance, RPIE Filings.

4. CROSS-SECTIONAL INCOME AND EXPENSE STUDY, NET OPERATING INCOME IN 1998 BY BUILDING SIZE AND LOCATION

	<u>Post-46</u>	<u>Pre-47</u>	<u>All</u>
Citywide	\$404	\$254	\$295
11-19 units	\$357	\$268	\$275
20-99 units	\$251	\$234	\$237
100+ units	\$566	\$374	\$494
Bronx	\$220	\$152	\$164
11-19 units	-	\$98	\$109
20-99 units	\$198	\$155	\$162
100+ units	-	\$166	\$210
Brooklyn	\$212	\$185	\$191
11-19 units	-	\$166	\$181
20-99 units	\$212	\$185	\$192
100+ units	\$197	\$207	\$202
Manhattan	\$816	\$354	\$451
11-19 units	\$639	\$372	\$377
20-99 units	\$517	\$317	\$330
100+ units	\$884	\$509	\$735
Queens	\$247	\$229	\$240
11-19 units	\$191	\$205	\$201
20-99 units	\$235	\$230	\$233
100+ units	\$258	\$255	\$258
St. Island	\$244	-	\$244

City and borough totals are weighted, while figures for building size categories are unweighted. All expense data is unaudited. The number of Post-1946 buildings with 11-19 units in the Bronx and Brooklyn, and buildings with 100+ units in the Bronx, were too small to calculate reliable statistics as was the number of Pre-47 bldgs in Staten Island.

Source: NYC Department of Finance, RPIE Filings.

5. CROSS-SECTIONAL DISTRIBUTION OF OPERATING COSTS IN 1998, BY BUILDING SIZE AND AGE

	<u>Taxes</u>	<u>Maint.</u>	<u>Labor</u>	<u>Admin.</u>	<u>Utilities</u>	<u>Fuel</u>	<u>Misc.</u>	<u>Insurance</u>	<u>Total</u>
Pre-47	20.7%	21.9%	12.4%	13.3%	10.3%	8.6%	7.4%	5.4%	100.0%
11-19 units	24.2%	21.8%	6.2%	13.3%	10.0%	10.0%	8.2%	6.4%	100.0%
20-99 units	19.7%	22.3%	11.9%	13.4%	10.4%	9.0%	7.7%	5.7%	100.0%
100+ units	22.3%	20.4%	20.3%	12.9%	9.9%	5.6%	5.4%	3.2%	100.0%
Post-46	27.4%	16.1%	18.6%	12.6%	9.6%	5.4%	6.9%	3.5%	100.0%
11-19 units	30.7%	18.6%	4.7%	16.3%	10.8%	6.1%	8.1%	4.8%	100.0%
20-99 units	24.6%	18.1%	14.2%	12.3%	11.3%	7.4%	7.2%	5.0%	100.0%
100+ units	29.1%	14.6%	22.2%	12.6%	8.4%	4.1%	6.6%	2.5%	100.0%
All Bldgs.	22.8%	20.1%	14.4%	13.1%	10.1%	7.6%	7.2%	4.8%	100.0%
11-19 units	24.8%	21.4%	6.1%	13.6%	10.1%	9.6%	8.2%	6.2%	100.0%
20-99 units	20.1%	21.9%	12.1%	13.3%	10.5%	8.9%	7.6%	5.6%	100.0%
100+ units	23.0%	19.8%	20.5%	12.9%	9.7%	5.4%	5.5%	3.1%	100.0%

Source: NYC Department of Finance, RPIE Filings.

6. CROSS-SECTIONAL DISTRIBUTION OF "DISTRESSED" BUILDINGS, 1998 RPIE FILINGS

	<u>Post-46 Bldgs.</u>			<u>Pre-47 Bldgs.</u>			<u>All Bldgs.</u>		
	<u>11-19</u>	<u>20-99</u>	<u>100+</u>	<u>11-19</u>	<u>20-99</u>	<u>100+</u>	<u>11-19</u>	<u>20-99</u>	<u>100+</u>
Citywide	9	24	9	256	502	8	265	526	17
Bronx	2	10	1	35	139	3	37	149	4
Brooklyn	1	1	3	54	96	1	55	97	4
Manhattan	3	5	2	153	226	4	156	231	6
Queens	2	6	3	14	39	-	16	45	3
St. Island	1	2	-	-	2	-	1	4	-
Totals:									
Citywide		42			766			808	
Bronx		13			177			190	
Brooklyn		5			151			156	
Manhattan		10			383			393	
Queens		11			53			64	
St. Island		3			2			5	

Source: NYC Department of Finance, RPIE Filings.

7. CROSS-SECTIONAL SAMPLE, 1998 RPIE FILINGS

	<u>Post-46</u>		<u>Pre-47</u>		<u>All</u>	
	<u>Bldgs</u>	<u>DU's</u>	<u>Bldgs</u>	<u>DU's</u>	<u>Bldgs</u>	<u>DU's</u>
Citywide	1,354	136,941	11,029	432,101	12,383	569,042
11-19 units	101	1,486	2,791	42,073	2,892	43,559
20-99 units	838	48,317	7,893	326,926	8,731	375,243
100+ units	415	87,138	345	63,102	760	150,240
Bronx	217	14,921	2,117	103,496	2,400	118,417
11-19 units	10	147	189	2,873	199	3,020
20-99 units	183	10,623	1,928	88,590	2,111	99,213
100+ units	24	4,151	66	12,033	90	16,184
Brooklyn	256	23,625	2,456	96,646	2,712	120,271
11-19 units	14	211	533	8,090	547	8,301
20-99 units	165	10,871	1,866	81,635	2,031	92,506
100+ units	77	12,543	57	6,921	134	19,464
Manhattan	379	55,733	5,142	182,055	5,521	237,788
11-19 units	30	450	1,729	25,863	1,759	26,313
20-99 units	178	9,101	3,245	119,597	3,423	128,698
100+ units	171	46,182	168	36,595	339	82,777
Queens	455	40,305	1,231	49,085	1,686	89,390
11-19 units	36	521	336	5,179	372	5,700
20-99 units	283	16,569	844	36,679	1,127	53,248
100+ units	136	23,215	51	7,227	187	30,442
St. Island	47	2,357	17	819	64	3,176
11-19 units	11	157	4	68	15	225
20-99 units	29	1,153	10	425	39	1,578
100+ units	7	1,047	3	326	10	1,373

Source: NYC Department of Finance, RPIE Filings.

8. LONGITUDINAL INCOME AND EXPENSE STUDY, ESTIMATED AVERAGE RENT AND INCOME CHANGES (1997-1998) BY BUILDING SIZE AND LOCATION

	Post-46			Pre-47			All		
	Rent	Income	Costs	Rent	Income	Costs	Rent	Income	Costs
Citywide	5.8%	5.2%	0.9%	5.4%	5.4%	1.9%	5.5%	5.3%	1.5%
11-19 units	7.7%	-7.2%	-2.0%	6.7%	6.9%	3.7%	6.8%	5.1%	3.1%
20-99 units	4.6%	4.8%	1.1%	5.6%	5.4%	1.6%	5.4%	5.3%	1.5%
100+ units	5.7%	5.4%	0.9%	3.2%	4.2%	1.6%	5.0%	5.1%	1.1%
Bronx	2.7%	1.4%	-1.7%	4.3%	3.9%	0.5%	3.9%	3.3%	0.1%
11-19 units	-	-	-	2.9%	3.3%	4.1%	2.9%	2.6%	3.7%
20-99 units	3.0%	1.9%	-1.1%	4.4%	3.9%	0.6%	4.2%	3.6%	0.3%
100+ units	-	-	-	3.9%	3.7%	-5.6%	2.6%	2.8%	-4.1%
Brooklyn	3.9%	3.7%	1.1%	3.8%	4.1%	0.7%	3.8%	4.0%	0.8%
11-19 units	-	-	-	5.5%	6.0%	3.4%	5.5%	5.3%	2.1%
20-99 units	4.9%	6.1%	3.6%	4.4%	4.4%	0.2%	4.5%	4.8%	1.1%
100+ units	-	-	-	-1.2%	0.8%	0.6%	2.3%	1.6%	-2.5%
Manhattan	6.7%	6.3%	0.4%	6.4%	6.5%	2.9%	6.5%	6.4%	2.2%
11-19 units	-	-	-	8.3%	7.9%	4.1%	8.4%	7.1%	3.8%
20-99 units	8.0%	7.8%	0.2%	6.9%	6.6%	2.8%	7.0%	6.7%	2.6%
100+ units	6.5%	6.2%	0.5%	3.9%	4.9%	2.5%	5.7%	5.8%	1.1%
Queens	4.5%	3.7%	2.3%	4.6%	4.4%	1.1%	4.6%	4.0%	1.8%
11-19 units	4.1%	4.6%	6.6%	4.4%	4.9%	1.3%	4.3%	4.8%	2.9%
20-99 units	3.7%	3.9%	0.6%	4.5%	4.2%	0.4%	4.0%	4.0%	0.5%
100+ units	5.5%	5.1%	5.3%	5.3%	5.0%	4.9%	5.5%	5.1%	5.2%
St. Island	5.1%	1.8%	2.8%	-	-	-	5.1%	1.8%	2.8%

City and borough totals are weighted, while figures for building size categories are unweighted. All expense data is unaudited. The number of Post-1946 buildings with 11-19 units in the Bronx, Brooklyn and Manhattan, as well as buildings with 100+ units in the Bronx and Brooklyn, were too small to calculate reliable statistics as was the number of Pre-47 bldgs in Staten Island.

Source: NYC Department of Finance, RPIE Filings.

9. LONGITUDINAL INCOME AND EXPENSE STUDY, NET OPERATING INCOME CHANGES (1997-1998) BY BUILDING SIZE AND LOCATION

	Post-46	Pre-47	All
Citywide	11.6%	11.9%	11.8%
11-19 units	-14.8%	12.9%	8.8%
20-99 units	11.9%	12.7%	12.5%
100+ units	11.2%	8.0%	10.3%
Bronx	7.6%	12.5%	11.3%
11-19 units	-	-	-
20-99 units	8.5%	12.1%	11.5%
100+ units	-	-	-
Brooklyn	9.1%	11.3%	10.8%
11-19 units	-	-	-
20-99 units	11.2%	13.0%	12.5%
100+ units	-	-	-
Manhattan	12.8%	12.1%	12.4%
11-19 units	-	-	-
20-99 units	18.2%	13.1%	13.6%
100+ units	12.3%	8.0%	11.1%
Queens	6.5%	10.1%	8.0%
11-19 units	0.3%	11.9%	8.6%
20-99 units	10.4%	10.8%	10.6%
100+ units	4.7%	5.1%	4.7%
St. Island	0.0%	-	0.0%

City and borough totals are weighted, while figures for building size categories are unweighted. All expense data is unaudited. The number of Post-1946 buildings with 11-19 units in the Bronx, Brooklyn and Manhattan, as well as buildings with 100+ units in the Bronx and Brooklyn, were too small to calculate reliable statistics as was the number of Pre-47 bldgs in Staten Island.

Source: NYC Department of Finance, RPIE Filings.

10. LONGITUDINAL SAMPLE, 1997 & 1998 RPIE FILINGS

	<u>Post-46</u>		<u>Pre-47</u>		<u>All</u>	
	Bldgs	DU's	Bldgs	DU's	Bldgs	DU's
Citywide	978	94,029	9,083	350,085	10,061	444,114
11-19 units	85	1,258	2,294	34,694	2,379	35,952
20-99 units	630	35,440	6,539	268,495	7,169	303,935
100+ units	263	57,331	250	46,896	513	104,227
Bronx	183	12,319	1,904	87,865	2,087	100,184
11-19 units	7	106	157	2,398	164	2,504
20-99 units	158	9,134	1,698	77,737	1,856	86,871
100+ units	18	3,079	49	7,730	67	10,809
Brooklyn	141	11,843	1,834	70,172	1,975	82,015
11-19 units	11	164	410	6,246	421	6,410
20-99 units	102	6,681	1,384	59,004	1,486	65,685
100+ units	28	4,998	40	4,922	68	9,920
Manhattan	324	46,397	4,269	150,834	4,593	197,231
11-19 units	29	438	1,426	21,398	1,455	21,836
20-99 units	151	7,727	2,718	100,291	2,869	108,018
100+ units	144	38,232	125	29,145	269	67,377
Queens	299	21,805	1,065	40,657	1,364	62,462
11-19 units	33	480	298	4,603	331	5,083
20-99 units	198	10,973	734	31,281	932	42,254
100+ units	68	10,352	33	4,773	101	15,125
St. Island	31	1,665	11	557	42	2,222
11-19 units	5	70	3	49	8	119
20-99 units	21	925	5	182	26	1,107
100+ units	5	670	3	326	8	996

Source: NYC Department of Finance, RPIE Filings.