

2004 Income and Expense Study

April 27, 2004

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2004 Income and Expense Study

what's new

From 2001-02, increases in operating costs outpaced increases in rental income and total income. Since operating cost growth was greater than the increase in income, net operating income (revenue remaining after operating expenses are paid) fell by 0.1%.

In stabilized buildings, from 2001-2002:

- ✓ Rental income increased by **4.0%**.
- ✓ Total income rose by **4.1%**.
- ✓ Operating costs increased by **6.9%**.
- ✓ Net operating income (NOI) declined by **0.1%**.

Introduction

As required by the Rent Stabilization Law, the Rent Guidelines Board (RGB) has analyzed the cost of operating and maintaining rental housing in New York City since 1969, as part of the process of establishing rent adjustments for stabilized apartments. 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 enabled researchers to compare PIOC-measured prices and costs with those reported by owners: Real Property Income and Expense (RPIE) statements from rent stabilized buildings collected by the NYC Department of Finance. These Income and Expense (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 has greatly expanded the information base used in the rent setting process. I&E statements not only describe conditions in rent stabilized housing in a given year, but also depict changes in conditions over a two-year period. Most importantly, I&E data encompasses both revenues and expenses, allowing the Board to more accurately gauge the overall economic condition of New York City's rent stabilized housing stock.

This I&E Study examines the conditions that existed in New York's rent stabilized housing market in 2002, the year for which the most recent data is available, and also the extent by which these conditions changed from 2001.

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 and other properties to file RPIE statements with the Department of Finance annually. While certain types of properties are exempt from filing RPIE forms (cooperatives, condominiums, buildings with fewer than 11 units or with an assessed value under \$80,000), the mandate produces detailed financial records on thousands of rent stabilized buildings. Although information on individual properties is strictly confidential, Department of Finance is allowed to release summary statistics of the data to the RGB.

Since 1990, the RGB has received data on samples of rent stabilized properties that file RPIE forms. Samples in the first two studies (data for 1988 and 1989) were limited to 500 buildings, because RPIE files were not automated. Upon computerization of I&E filings in 1992 (for cross-sectional data from 1990 and longitudinal data from 1989-90), the size of the samples used in RGB I&E studies has grown to more than 12,000 properties containing 600,000 units.

Cross-Sectional Study

Rents and Income¹

In 2002, rent stabilized property owners collected monthly rent averaging \$821 per unit. As in prior years, units in pre-war buildings rented for less on average (\$760 per month) than those in post-war buildings² (\$990 per month). At the borough level, stabilized monthly rents were \$1,081 in Manhattan, \$745 in Queens, \$643 in Brooklyn and \$608 in the Bronx (as noted in the Methodology, figures for Staten Island were not included throughout the analysis due to the small number of buildings in the data sets). In Core Manhattan (the area south of East 96th and West 110th Streets), average monthly rents were \$1,262 per unit while rents in Upper Manhattan were \$683 per unit. Stabilized property owners in all New York City neighborhoods excluding Core Manhattan averaged rent collections of \$664 per unit per month.

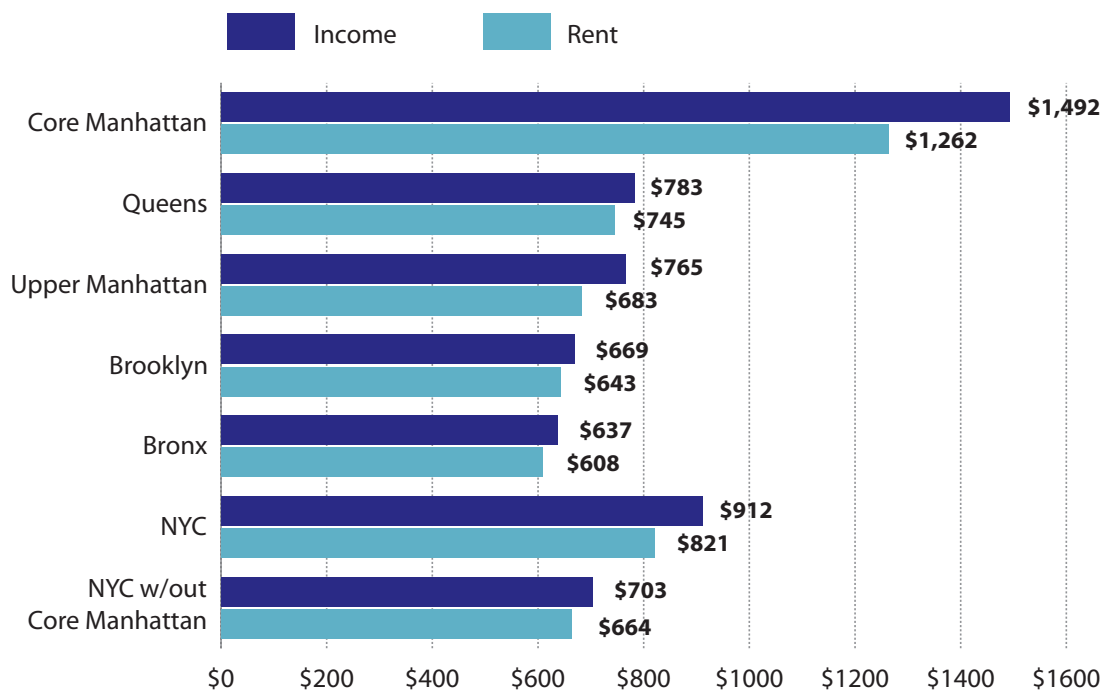
Many owners of stabilized buildings augment income from their apartment rents by selling services to

their tenants as well as by renting commercial space. Current RPIE filings show an average monthly gross income of \$912 per rent stabilized unit in 2002, with pre-war buildings earning \$848 per unit and those in post-war properties earning \$1,088 per unit. Gross income was highest in Core Manhattan at \$1,492 per unit per month and lowest in the Bronx at \$637. Monthly income per unit in the City, excluding Core Manhattan, was \$703. These gross income figures encompass rent from stabilized apartments as well as the sale of services (e.g. laundry, vending, parking) and commercial income. Such proceeds accounted for a 10% share of the total income earned by building owners in 2002, about the same as the distributions observed in the last five I&E studies. Core Manhattan owners particularly benefit from commercial income, with 15% of their total revenues coming from commercial units and services.

In the other boroughs, property owners did not receive as large a portion of their total income from commercial sources. When Core Manhattan is excluded from the calculation, building owners in the rest of the

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

Stabilized Rent and Income Were Highest in Core Manhattan in 2002



* See Endnote I
Source: NYC Department of Finance, 2002 RPIE Filings

City received 6% of their total income from commercial sources. The respective figures for the other areas were 5% in Queens and the Bronx, 4% in Brooklyn and 11% in Upper Manhattan. The graph on the previous page shows the average rent and income collected in 2002 by borough, and for the City as a whole. See Appendix 3.

Comparing Rent Measurements

Two independent data sources, the triennial NYC Housing and Vacancy Survey (HVS) and the NYS Division of Housing and Community Renewal (DHCR) annual registration data, provide important comparative rent data to the collected rents stated in RPIE filings. A comparison of the collected RPIE rents to the HVS and DHCR rents is a good indicator of the overall rental market and reflects both how well owners are able to collect the rent roll and the prevalence of vacancies.

Rents included in RPIE filings are different than HVS and DHCR figures primarily because of differences in how average rents are computed. RPIE data reflects actual rent collections that account for vacancies or non-payment of rent. HVS data consists of contract rent (the amounts stated on leases, which includes both legal and preferential rents) while DHCR data consists of legal rents registered annually with the agency. Because HVS and DHCR rent data do not include vacancy and collection losses, in most years, these rents are generally higher than RPIE rent collections data. Furthermore, RPIE information reflects rents collected over a 12-month period, DHCR data reflects rents registered on April 1, 2002, and 2002 HVS figures are contract rents in effect during the first four months of 2002. Because 2002 was the year in which the HVS was conducted, it is possible to compare rent data from all three sources. In sum, despite the anomalies between the three rent indicators, the difference between RPIE rents and HVS or DHCR rents is a good estimate of vacancy and collection losses incurred by building owners, and the relative change in the gap is one way of estimating the change in such losses from year to year.

Three years ago, for the first time in the history of this survey, the RPIE post-46 mean collected rent exceeded the average contract rent computed by the HVS. Now, for the first time, the latest RPIE and HVS data (2002) shows the RPIE mean collected rent of \$821 for *all* rent regulated apartments exceeds the average contract rent of \$785 computed with HVS data, by 5%.³ In prior years, the HVS figure always exceeded the RPIE mean. For instance, in 1999, the HVS mean for all regulated apartments was 2% greater than the RPIE mean, in 1996, it was 9% greater, 6% in 1993 and 4% in 1991.

Rent by building age also varies between the HVS and RPIE. The HVS mean contract rent in older pre-war apartments was \$768, which was 1% higher than the RPIE average collected rent of \$760 (see endnote 2). Furthermore, the HVS average rent for units built after 1946 (\$846) was 15% lower than the 2002 RPIE average rent of \$990 [see sidebar].

In comparing annual RPIE and DHCR average rents, the gap between the two has contracted steadily since 1991, when the average RPIE collected rent was 15%

RPIE vs. HVS data

DIFFERENCES BETWEEN MEASUREMENT SOURCES 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 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 average monthly rent (\$821) was higher than the HVS average monthly rent (\$785) this year may be due to a few factors.

Both the RPIE and the HVS rents are mean figures which can be affected by outliers in each sample. The HVS mean rent may be lower than expected because of an exodus of high-rent units due to vacancy and luxury decontrol.

The fact that the HVS average rent 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. This is seen especially among post-46 Manhattan buildings, where the RPIE average was \$550 greater than the HVS mean rent.

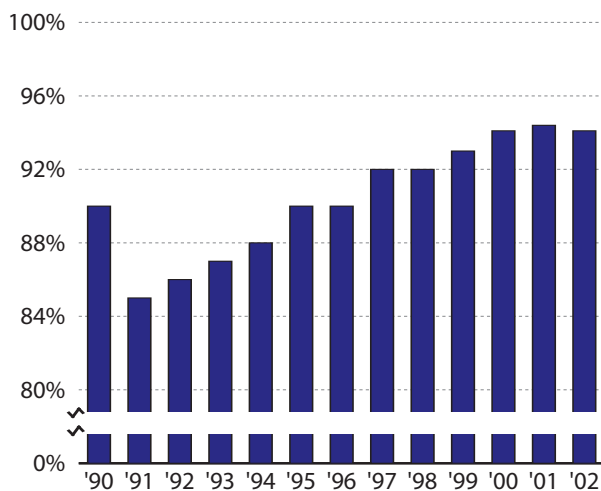
In this sense, the \$821 RPIE figure may be higher, but it is nonetheless a better reflection of the economic condition of buildings containing such units. Conversely, HVS data on stabilized rents, which does not include what are presumably very high rents in deregulated apartments, does not offer a clear portrait of the economic health of buildings with a mix of regulated and deregulated units.

lower than the average DHCR registered legal rent. In fact, from 1991-2001, the difference between RPIE and DHCR rents has decreased by almost two-thirds, to 5.6%. Current RPIE returns indicate that the gap between I&E rent (\$821) and DHCR's mean stabilized rent (\$873) was 5.9% in 2002, a slightly higher rate than was observed in last year's Income and Expense Study. Despite the increase, compared to the early 1990s, a significantly smaller gap between collected and legal rent remains, indicating that building owners continue to collect a greater portion of their legal rent rolls due to a lower rate of vacancies, fewer "preferential rents"⁴ or a smaller number of non-paying tenants (see graph below).

At the borough level, the gap between collected and legal rent varies widely. In 2002, Manhattan property owners collected an average rent (\$1,081) that was 0.9% below DHCR's average legal rent for the borough (\$1,091) while owners in the other boroughs collected average rents that were 9.6% lower than legal rents in Queens and 14.5% lower in both the Bronx and Brooklyn. At least part of this differential in the other boroughs is due to preferential rents, usually offered when the legal stabilized rent exceeds the market rate for the area.

Average Monthly Citywide Collected Rents as a Share of Average Monthly DHCR Legal Registered Rents 1990-2002

Percentage of Legal Rent Collected Decreased Slightly in 2002



Source: DHCR Annual Rent Registrations; NYC Department of Finance, 1990-2002 RPIE Filings

rent comparisons

Slower increase in RPIE Rent Collections in 2002 after growing greater than DHCR Legal Rents and the RGB Rent Index since 1990

	RPIE Rent Growth	DHCR Rent Growth (Adjusted)	RGB Rent Index (Adjusted)
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%	4.2%	4.2%
98-99	5.5%	3.1%	3.7%
99-00	6.2%	4.1%	3.9%
00-01	4.9%	4.8% ^{oo}	4.8%
01-02	4.0%	5.2%	4.8%
1991 to 2002*	71.4%	56.9%	60.3%

*Not adjusted for inflation.

^{oo}Revised from prior study due to DHCR update.

Source: DHCR Annual Rent Registrations; NYC Department of Finance, 1990-2002 RPIE Filings

A final 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 above shows, up until last year's study, average rent collection increases were higher than the renewal lease increases allowed by the RGB's guidelines. However, from 2001 to 2002, RPIE rent collections increased by 4.0%, less than the increase in the RGB rent index (4.8%, adjusted for the July-June fiscal year), the first time since 1991-92 that the index increase exceeded RPIE rent increases. There are various factors which may contribute to the RGB index being greater than the RPIE rent growth: 1) owners' inability to increase renewal rents by the maximum guideline permitted and 2) decline in vacancy and collection losses.

During the recessionary period of the early 1990s, collected RPIE rents did not grow as

quickly as DHCR legal rents or the RGB rent guidelines. This indicates that owners during this period either offered more preferential rents or were simply unable to collect the full amount allowed by the guidelines during that period. As the City's real estate market and the general economy began to recover in 1993, rent collections grew more quickly than the guidelines or legal rents, indicating a drop in vacancy and collection losses, fewer preferential rents, and more rent increases due to renovations. A longer view of the three indices shows that overall, collected rents have grown more quickly than the impact of rent guidelines or legal rents from 1991 to 2002. During that period, RPIE collected rents increased 71%, the RGB Rent Index increased 60%, and DHCR adjusted legal rents increased 57% (these figures are not adjusted for inflation; see the table on the previous page).

were lowest in Brooklyn, the Bronx and Queens (\$449, \$455 and \$501, respectively) and highest in Manhattan (\$736). Looking more closely at Manhattan properties, costs for units located in Core Manhattan averaged \$833 a month while the costs in Upper Manhattan were \$531. The average monthly operating costs for stabilized building owners in New York City, excluding Core Manhattan, reduces the City average to \$476. The graph below details average monthly expenses by cost category and building age for 2002. See Appendices 1 and 2 for a complete breakdown of costs in pre- and post-war buildings.

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

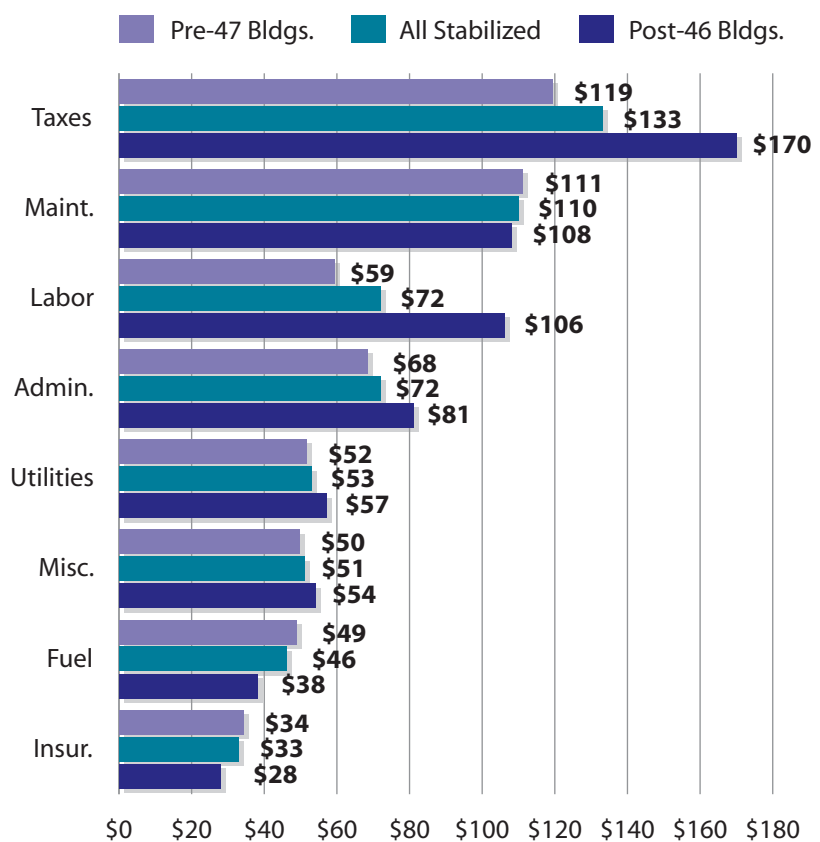
Operating Costs

Rent stabilized apartment buildings incur several types of expenses in order to operate efficiently. RPIE filings include data on eight categories of operating and maintenance (O&M) costs: taxes; labor; utilities; fuel; insurance; maintenance; administrative and miscellaneous 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 \$570 in 2002. Costs were lower in units in pre-war buildings (\$543), and substantially higher among post-war structures (\$644). Geographically, average costs

Average Monthly Expense per Dwelling Unit per Month

Taxes Are the Largest Expense in 2002



Source: NYC Department of Finance, 2002 RPIE Filings

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 the 2002 RPIE O&M cost (\$570) by the results of the 1992 audits results in an average monthly O&M cost of \$523 citywide and \$437 on average in NYC neighborhoods outside of Core Manhattan.

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. This year, average audited O&M costs for units in "residential-only" buildings were \$487 per month, \$36 less than the audit-adjusted average (\$523) for all stabilized buildings in 2002. As in previous RGB Income and Expense Studies, most of the difference in costs between the two types of properties stemmed from taxes, administration and utilities expenses that were respectively 15%, 9%, and 6% lower on average for buildings without commercial space than for all stabilized properties.

Components of Operating Costs

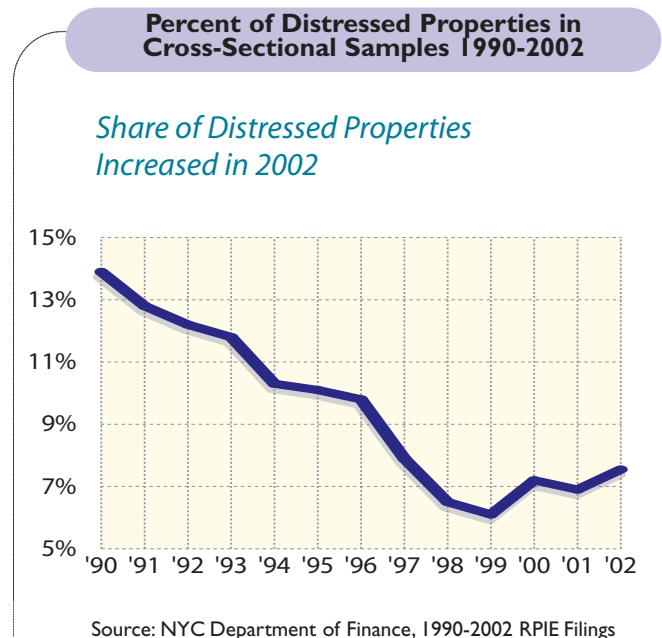
In 2002, just over two-thirds of total expenses in stabilized buildings were comprised of taxes, maintenance, labor and administration costs. Older buildings on average spent proportionately more on maintenance, fuel and insurance costs. Conversely, newer buildings spent relatively more money on taxes and labor. Pre-war and post-war buildings spent similar proportions on utilities, administration and miscellaneous costs. These spending patterns have not varied much in recent years. (See Appendix 5 for distributions of costs by building size and age)

As in previous years, building size affected the distribution of costs in rent stabilized buildings in 2002. As described above, taxes, maintenance, labor and administration costs dominated total operating costs in all buildings. Labor costs continued to be particularly associated with size, comprising much larger shares of

total operating costs in larger buildings, probably due to the concentration of large, post-war stabilized buildings in Manhattan, which tend to employ doormen. In contrast, fuel, maintenance and insurance costs consumed less of each operating and maintenance dollar in larger buildings, probably due to efficiencies of scale realized by larger properties, particularly those with 100 or more units. For a breakdown of cost components by building size, age and borough, see Appendices 1, 2 and 5.

"Distressed" Buildings

Buildings that have operating and maintenance costs greater than gross income are considered distressed. Among the properties that filed 2002 RPIE forms, 932 buildings, or 7.5% of the cross-sectional sample, had O&M costs in excess of gross income, up from the 6.9% found the prior year. In 2002, only 51 (5.5%) of these distressed buildings were built after 1946. Most distressed stabilized properties are mid-size (20 to 99 units), pre-war construction, and are located in the Bronx, Manhattan and Brooklyn. The chart on this page shows how the share of distressed buildings in the cross-sectional sample has changed since 1990. From a high of 13.9% of the sample of stabilized properties found in 1990, the proportion of distressed buildings declined to a low of 6.1% in 1999. Since then, the proportion has



increased in two of the last three years, to 7.5% in 2002.

Buildings with expenses greater than revenues in 2002 suffered from both abnormally high expenses (126% of the 2002 all-building average), and low rents and income (respectively, only 67% and 66% of the all-building average). Comparing nominal costs, distressed buildings paid 43% more in fuel costs, 36% more in both utility and maintenance expenses, 30% more in both labor and administrative costs, and 29% more for insurance. These buildings also paid substantially less property tax (63% of the all-building average) than all rent stabilized buildings. Appendix 6 shows the distribution of distressed buildings by age, size and location.

Net Operating Income

In most stabilized buildings, revenues exceed operating costs, yielding funds that can be used for mortgage payments, improvements and/or pre-tax profit. The amount of income remaining after all 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 profitability 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 \$342 of net income per month in 2002, with units in post-war buildings earning more (\$444 per month) than those in pre-war buildings (\$305 per month). Average monthly NOI tended to be considerably greater for stabilized properties in Manhattan (\$532) than for those in the other boroughs: \$182 in the Bronx, \$220 in Brooklyn and \$282 in Queens. There was a large dichotomy when looking at NOI on a sub-borough level in Manhattan. Core Manhattan properties earned on average \$659 a month in NOI, while properties in Upper Manhattan had an NOI of \$234, which was close to the monthly NOI average calculated citywide, excluding Core Manhattan (\$227). Average monthly NOI in "residential-only" properties citywide was \$291 per unit in 2002, 15% lower than the norm for all stabilized buildings. For a

tabulation of NOI by building size, age and location, see Appendix 4.

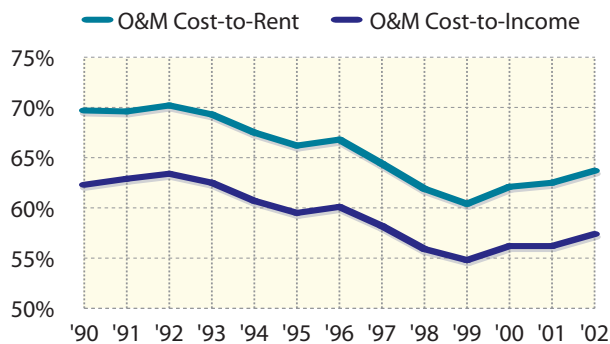
NOI reflects the revenue available after payment of operating costs, that is, the money owners have for financing their buildings, making improvements, and for pre-income tax profits. While NOI should not be the only criteria to determine the ultimate profitability of a particular property, it is a useful exercise to calculate the annual NOI for a hypothetical "average stabilized building" with 11 units or more. Multiplying the average monthly NOI of \$342 per stabilized unit by the typical size of buildings in this year's cross-sectional sample (49 units) yields an estimated mean annual NOI of about \$200,000 in 2002. Notably, the RPIE data cannot provide estimates for NOI in rent stabilized buildings with 10 or fewer apartments.

Operating Cost Ratios

Another way to evaluate the profitability of New York City's rent stabilized housing is by measuring the ratio of expenses to revenues. Traditionally, the RGB has used O&M Cost-to-Income and O&M Cost-to-Rent ratios to assess the overall health of the stabilized housing stock, presuming that buildings are better off by spending a lower percentage of revenue on expenses. The graph on this page shows how over the period from 1990-2002,

Ratios of Citywide Average Monthly Audited O&M Costs to Average Monthly Gross Income and Rent 1990-2002

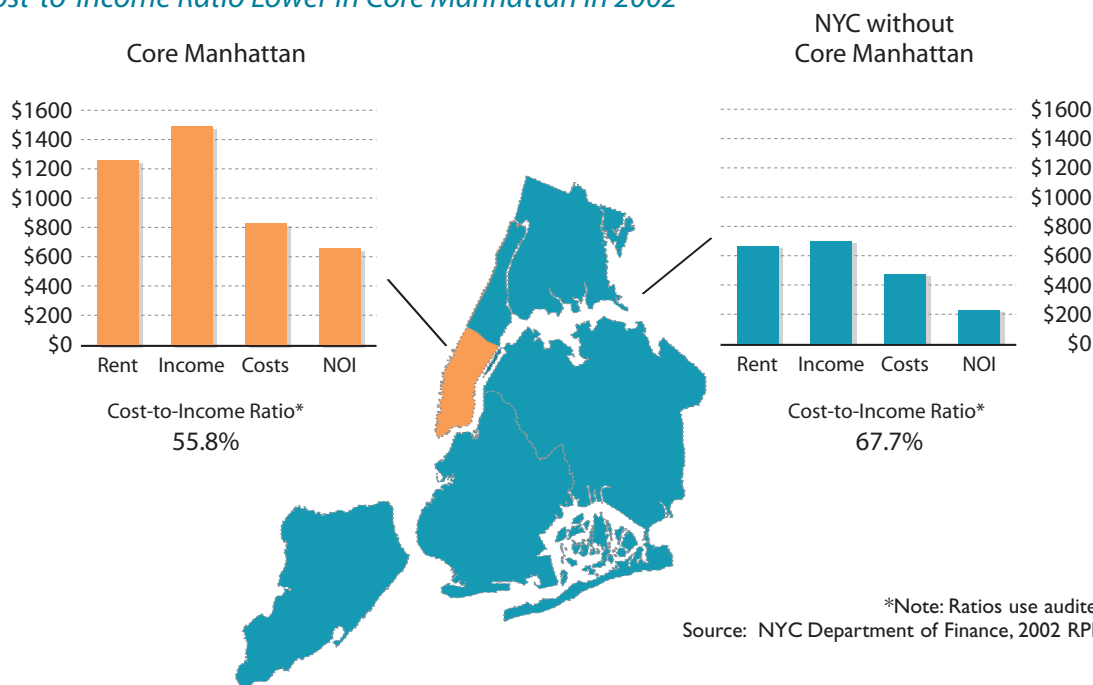
Both Cost-to-Income and Cost-to-Rent Ratios Rise in 2002



Source: NYC Department of Finance, 1990-2002 RPIE Filings

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, 2002

Cost-to-Income Ratio Lower in Core Manhattan in 2002



the proportion of total income and rent collections spent on audited operating costs has fluctuated but largely decreased in stabilized buildings citywide. The Cost-to-Income ratio in 2002 is 57.4%, a slight increase over the prior year. This means that on average, owners of rent stabilized properties spent about 57 cents out of every dollar of revenue on operating and maintenance costs in 2002.

Since the highest ratio of 63.4% measured in 1992, the Cost-to-Income ratio has fallen every year except for two years in which there were spikes in heating oil costs, 1996 and 2000, and in 2002, when insurance and taxes saw large increases. Overall, from 1990 to 2002, the Cost-to-Income ratio declined by 4.9 percentage points. In other words, owners report that they devoted a little less than 5 cents from every dollar of revenue towards expenses in 2002 than they did in 1990. Looking at the ratio of costs to rent collections, operating costs in 2002 were 63.7% of revenues from rent, an increase of 1.2 percentage points from the year before.

Rents, income and costs per unit on average were highest in Core Manhattan (see map and graphs above)

in 2002. When Core Manhattan is excluded from the analysis, the average revenue and costs figures are generally lower, but the two areas also have very different expense to revenue ratios. The Cost-to-Income Ratio for the rest of the City was 62.2%, significantly higher than the Cost-to-Income Ratio for stabilized buildings in Manhattan's Core (51.3%). These figures indicate that on average, owners of stabilized properties outside of Core Manhattan spend 11 cents more of every dollar of revenue on expenses compared to their counterparts in Core Manhattan.

Net Operating Income after Inflation

The amount of net income is a function of the level of expense and the level of revenue in a given year (revenues minus operating expenses equals net operating income). Adjusting NOI as well as rent, income and costs figures for inflation (in constant 2002 dollars) and comparing different base years to the latest data available is a useful way to assess the health of the stabilized housing stock and how well revenues have been meeting or exceeding expenses without erosion by inflation.

Converting income and expense figures into constant 2002 dollars helps to analyze how much NOI has grown in real terms since the RGB began collecting RPIE data. Point-to-point comparisons of average monthly figures show that from 1989 to 2002 (a 14-year period), after adjusting for inflation, NOI, the surrogate measure for profit, has grown 18%, indicating that revenues have outpaced expenses to the extent that average monthly NOI was worth 18% more in 2002 than it was in 1989, after adjusting for inflation.⁵

Another way to look at how rent, income, costs and NOI have changed absent the effect of inflation is to graph inflation-adjusted monthly figures for each of the four components measured in the I&E studies. The graph on this page shows changes in per month, per unit rent, income, costs and NOI, adjusted into constant 2002 dollars from 1989 to 2002. The graph shows that inflation-adjusted rents, income, costs and NOI all lost real value from 1989 to 1992. Revenues then steadily increased each year since 1993, exceeding their 1989 levels in 1998. For the entire period, revenues gained in real value, with monthly rents worth 9% (\$69) and income worth 9% (\$79) more in 2002 than they were in 1989.

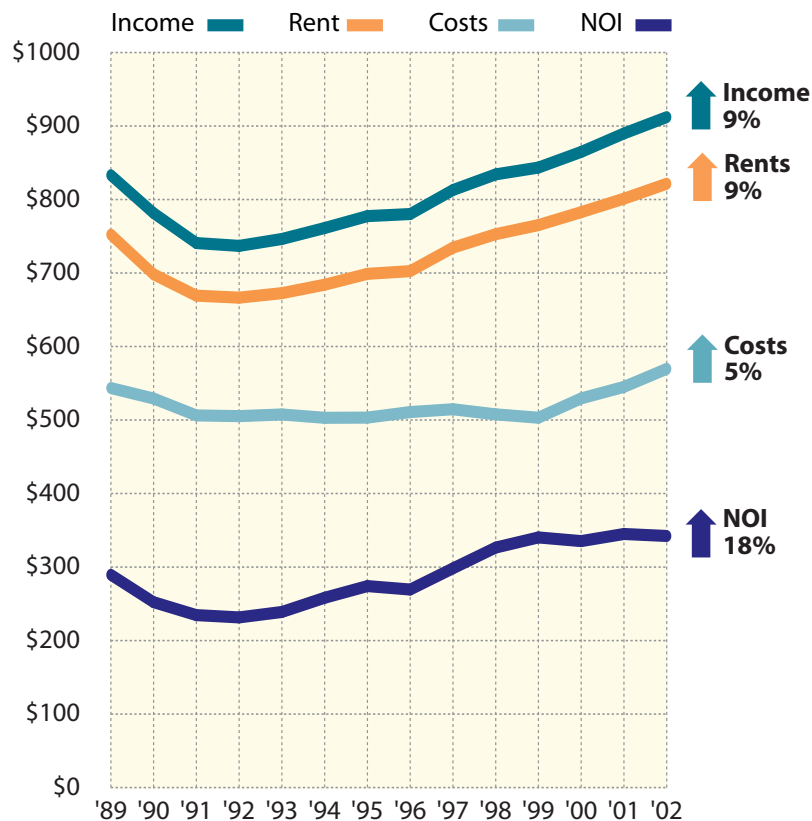
Tracking costs, the graph shows that from 1993, costs fluctuated slightly with the exception of 2000, a year with a large spike in fuel costs, 2001, which experienced larger tax and insurance increases and 2002, when taxes, administrative and insurance costs increased. Inflation-adjusted costs returned to their 1989 levels in 2001. The real growth in costs is 5% (\$26) over the 1989-2002 period.

After seven years in which NOI did not reach levels seen in 1989, the years 1997-2001 showed real improvement in NOI from the base year 1989, except for a slight decline in 2000. From 1989-96 the ratio of NOI/income was about 33%; while from 1997-2001, NOI's share of income was about 39%. Average monthly NOI is worth 18% more after inflation in 2002 than in 1989 (or \$53, the \$79 real gain in income minus the \$26 real gain in costs).

NOI After Inflation

After Inflation NOI Gained Most in Value 1989-2002

(Average Monthly Income, Rent, Operating Costs and Net Operating Income per Dwelling Unit in Constant 2002 Dollars)



Note: Percent changes are point-to-point measurements and should not be considered cumulatively.

Source: RGB Income and Expense Studies, 1991-2004

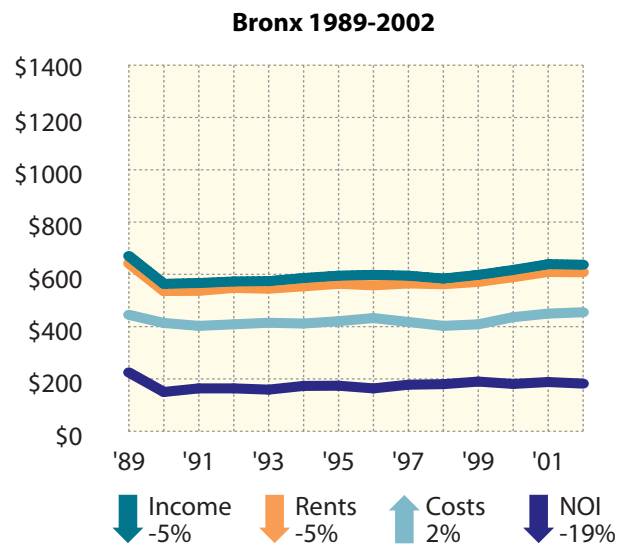
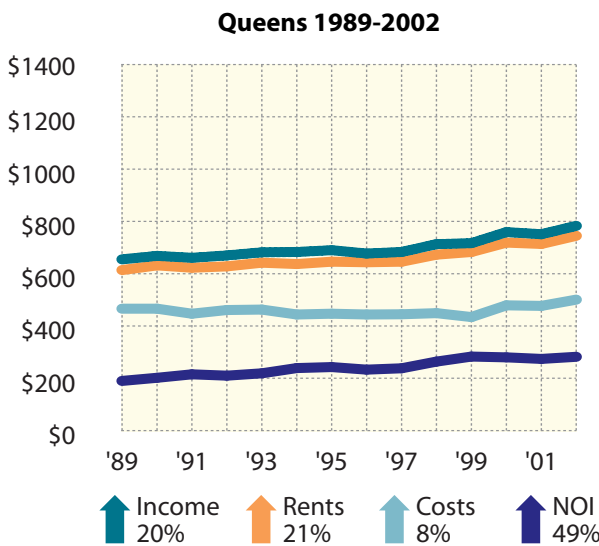
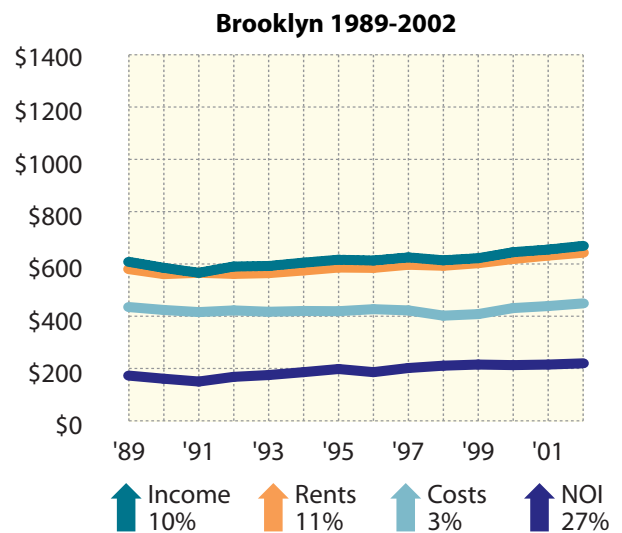
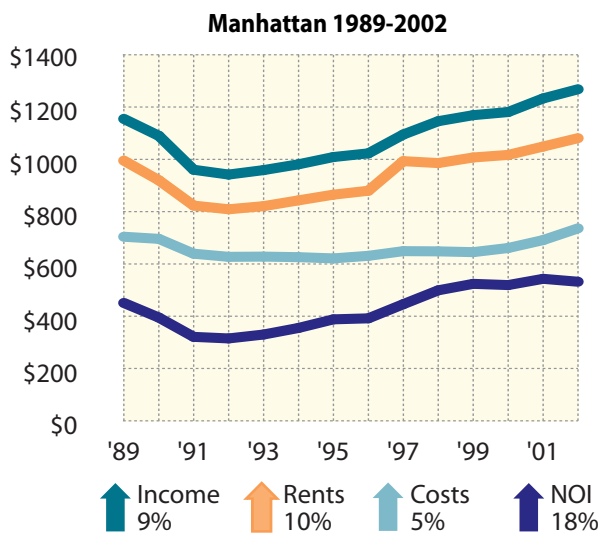
While the citywide chart of inflation-adjusted revenue, expense and NOI figures is useful for demonstrating the overall stabilized rental housing market, disaggregating the same figures by borough shows how the market can differ from area to area. At least two interesting points emerge from the borough charts. First, the four borough graphs on the following page, each shown on the same scale, reveal that most of the inflation-adjusted numbers for rent, cost and NOI would fall between \$200 and \$700 over the years of study if not for the data from Manhattan. Manhattan's

relatively high revenues, expenses and NOI figures put significant upward pressure on the citywide numbers. The nominal Manhattan rent, income, cost and NOI figures bring the citywide averages for these categories up well beyond the \$200-\$700 range seen in the inflation-adjusted, outer borough charts. Secondly, it is notable that revenues outpaced costs causing net income to rise

strongly in all the boroughs except the Bronx from 1989-2002. Looking at each of the boroughs individually, from 1989 to 2002, most boroughs saw increases in their net income, with Queens seeing the largest increase, 49%, followed by Brooklyn at 27% and Manhattan at 18%. Conversely, in the Bronx, inflation-adjusted NOI fell 19% over the same 1989-2002 period.

NOI After Inflation per Borough, 1989-2002

Inflation-Adjusted NOI Rises In All Boroughs Except the Bronx since 1989



Source: RGB Income and Expense Studies, 1991-2004

Longitudinal Study

Rents and Income

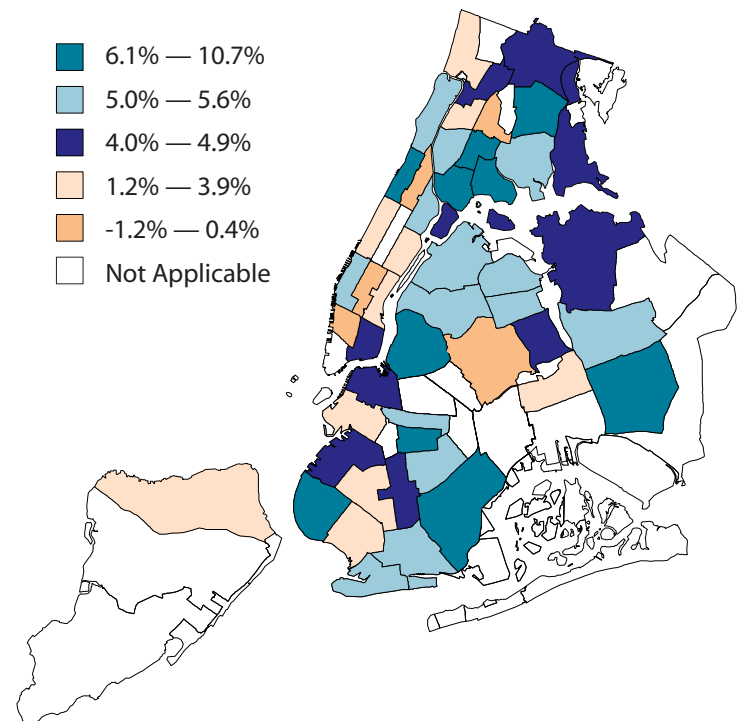
Average rent collections in stabilized buildings rose by 4.0% in 2002, which was 0.9 percentage points lower than the increases observed during 2001 (4.9%). Increases in rent collections occur for many reasons, including increases allowed under RGB renewal guidelines (which in 2002, ranged from 2 to 6 percent, depending on the effective date and the length of the renewal lease), vacancy allowances of 18-20% allowed under the Rent Regulation Reform Act of 1997 and investments in individual apartment and building-wide improvements.

Unlike last year, rent collections in newer (post-46) buildings increased less (2.7%) than those in older (pre-47) properties (4.6%). Rent collections for all stabilized units increased by 5.0%, 4.8%, and 1.8% for small (11-19 unit), medium (20-99 unit), and large (100+ unit) buildings respectively. Once again, smaller buildings have the highest increases in rent collections, seeing the highest rent growth of all the size categories for nine straight years.

All but three of New York City's community districts (CDs) saw gains in rent collections from 2001-02. Similar to last year, rent collections increased more rapidly in the other boroughs than they did in the borough of Manhattan. Rent collections in stabilized properties located in Manhattan rose 2.9% from 2001-02. In Manhattan, the CD of Morningside/Hamilton Heights had the highest increase in rent collections of 6.2%. Two of the three CDs seeing a decline in rent collections were in Manhattan: Midtown saw a decline of 0.1% and Greenwich Village declined by 0.8%. All other Manhattan community districts had rent increases of between 0.4% and 5.5%. Throughout the city, the district with the highest rent growth was Flatlands-Canarsie in Brooklyn (10.7%). In the Bronx, Morrisania showed the largest increase in rents at 9.5%, and in Queens, rent growth was highest in Jamaica (6.5%). Overall, rent collections grew in Core

Change in Collected Rents by Community Districts 2001-02

Stabilized Rents Rose in Most Community Districts in 2002



Note: Eleven 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. Community District percent changes are not weighted, borough-level averages are weighted.

Source: NYC Department of Finance, 2002 RPIE Filings

Manhattan by 2.6% while in Upper Manhattan, rent collections grew by 5.6%. In the other boroughs, rent collections grew by 5.2% in Brooklyn, 4.9% in Queens and 4.6% in the Bronx from 2001-02.

As the rent collection growth map on this page shows, rent growth was propelled by several districts not only in Manhattan but also spread throughout the City. When rent collections in Core Manhattan properties are excluded, an average rent growth of 5.0% was calculated for the remainder of the City.

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

and sales of services, increased by 4.1% from 2001 to 2002, 1.1 percentage point lower than income collection in the previous year. Revenues rose in pre-war buildings by 4.6% and in post-war buildings by 3.1%. In the boroughs of Brooklyn, Queens and the Bronx, property owner's total income grew by 5.4%, 5.0% and 4.8% respectively. The gross income of Core Manhattan properties grew by 2.5%, while Upper Manhattan income grew 5.7%, more rapidly than the City average (4.1%). When Core Manhattan is excluded from the analysis, the rest of the City's average income growth is 4.8%, which indicates that the lower increase in Core Manhattan income pulled the Citywide average down in 2002.

Gross income grew in all three size categories of buildings, with small buildings experiencing the largest growth (5.4%). Medium buildings experienced a 4.8% increase in income, while the collected income of large buildings grew by 2.0%. See Appendix 8 for a complete breakdown.

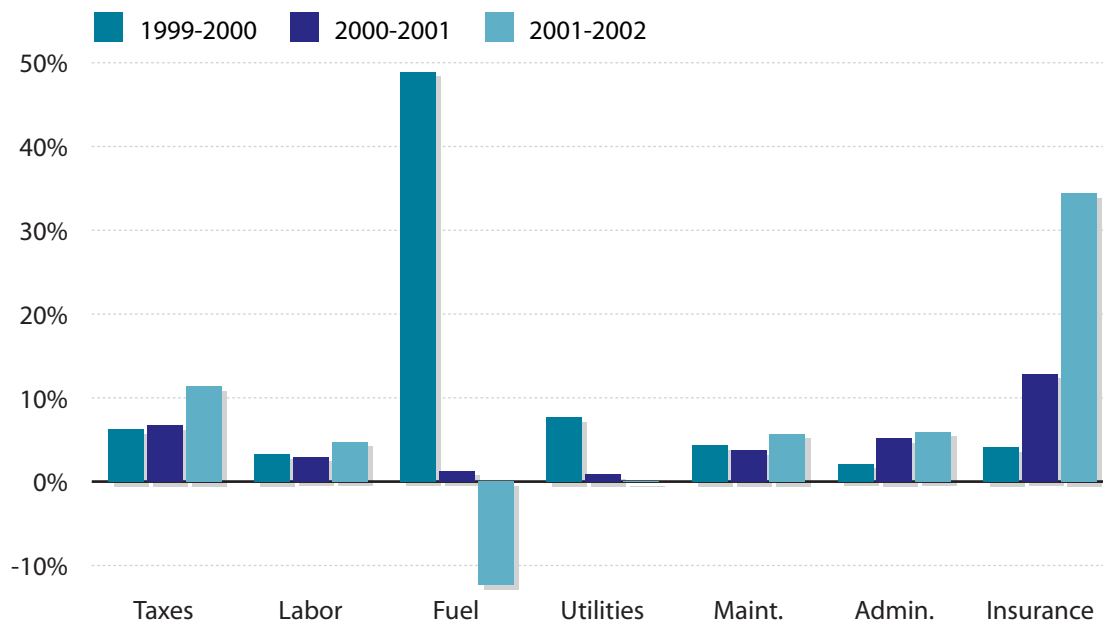
Operating Costs

Expenses in stabilized buildings grew 6.9%, a higher rate than increases in both rents (4.0%) and total income (4.1%) from 2001-02. Costs rose slightly less in newer buildings, up 6.7%, in contrast to the increase in costs realized by pre-war buildings (7.0%). While I&E studies have found 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, maintenance, insurance or utilities, as the graph below shows.

The 6.9% increase in expenses found in rent stabilized buildings from 2001-2002 was 2.1 percentage points higher than the increase observed from 2000-2001 (4.8%). From 2001-02, insurance, taxes, maintenance, labor and administrative costs increased greater than the overall NYC metro inflation rate of 2.6%, driving overall cost growth. Most of the major components within total O&M costs increased from

Change in Cost Components, 1999-2002

Changes in Fuel Costs and Insurance Show Greatest Volatility Among Operating and Maintenance Expenses from 1999-2002



Source: NYC Department of Finance, 1999-2002 RPIE Filings

2001-02. Insurance costs increased the most rapidly, by 34.4% from 2001-02. Tax costs increased by 11.3%, administrative costs by 5.9%, maintenance by 5.7%, and labor costs grew by 4.8%. Utilities remained virtually unchanged and only the cost of fuel declined, falling by 12.4% from 2001-02.

As in past years, building size influenced the rate of growth; expenses rose by 7.2%, 6.5%, and 7.7% respectively in small, medium, and large buildings. This year, costs rose most rapidly in the borough of Manhattan (7.7%), and the least in Brooklyn (5.6%). For a detailed breakdown of the changes in rent income and costs by building size age and location, see Appendix 8.

RPIE Expenses and the PIOC

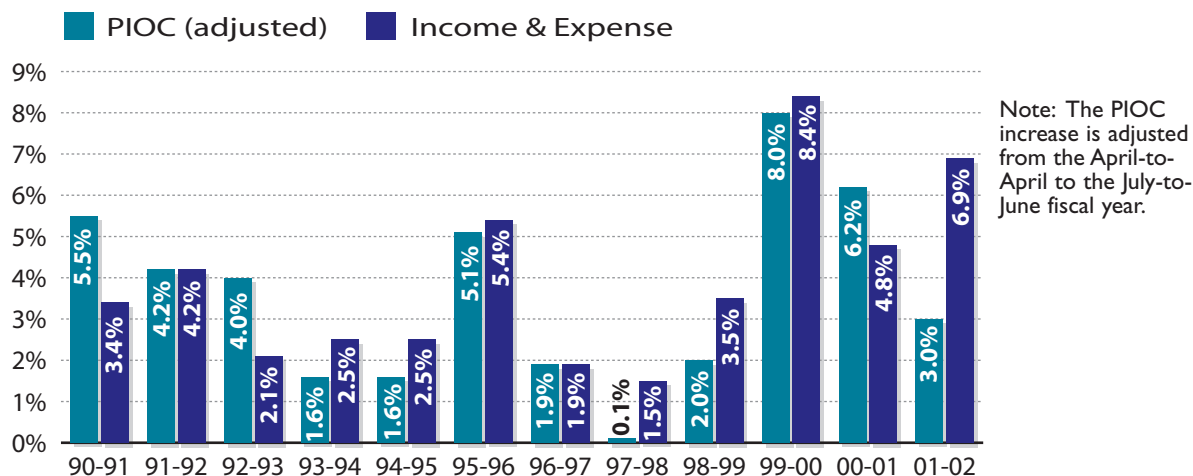
The RPIE and the RGB's long-running survey, the Price Index of Operating Costs (PIOC), each provide a form of independent verification for the expense findings in the other. However, comparison of I&E and PIOC data is somewhat distorted due to differences in the way each instrument defines costs and time periods. For example, there is a difference between when expenses are incurred and actually 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 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, which may cause a slight 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.

Over the past several years, growth in PIOC-measured costs has consistently differed from expense increases reported in RPIE data. During the 1990s, the PIOC grew faster in periods of economic downturn, and RPIE overall expenses have grown in recovery. The "gap" between the two indices has largely narrowed from 1993 until 2001, but this year, the gap between the PIOC and the I&E data grew again. Expenses in 2002 grew the most in areas that owners have little choice but to pay, most notably for insurance and taxes. As the graph below shows, the most recent adjusted PIOC change in prices was 3.0% while the increase in RPIE expenses was 6.9%, a difference of 3.9 percentage points between the two indices from 2001-02.

Change in Operating & Maintenance Costs, I&E and the PIOC, 1990-91 to 2001-02

From 2001-2002, Owner-Reported RPIE Costs Increased at a Higher Rate than those Measured in the PIOC



Source: NYC Department of Finance, 1990-2001 RPIE Filings; PIOC 1990-2002

The RPIE reported larger increases than the PIOC from 2001-02 in most cost components. The largest difference was seen in insurance costs, with the RPIE increasing 11.9 percentage points more than the PIOC. Taxes, utilities and maintenance RPIE costs also rose between 2.1 and 2.6 percentage points more than the PIOC. The adjusted PIOC reported a fuel price decrease of 10.3% while the I&E showed a fuel cost decrease of 12.4% from 2001-02, a difference of 2.1 percentage points.

Insurance costs differed strongly between the two indices, with the adjusted PIOC measuring a rise of 22.5%, and the I&E an increase of 34.4%, a difference of almost 12 percentage points. The PIOC is strong at tracking costs during economic upswings, when all types of costs and prices are generally increasing, and when accelerating revenue growth induces fewer owners to cut back on maintenance services and other elective costs. In periods of economic downturn, owners may substitute goods, making the PIOC's 'market basket' of goods less representative.

Comparing insurance price increases in the PIOC (7.8% and 22.5% in 2001 and 2002, respectively, adjusted) and owner's reported cost increases in the I&E (12.9% and 34.4%, respectively) shows much larger increases in I&E insurance costs, revealing the great volatility of insurance prices and that insurance costs are measured differently in the two studies—weighted, owner-reported, unaudited, larger buildings are emphasized in the I&E, while unweighted, insurance company-verified owner-reported bills surveyed in the PIOC of all sizes of buildings—may account for this difference. In addition, the PIOC includes 6-10 unit buildings, while the I&E study, due to limitations on RPIE data, excludes these buildings. It is also important to note that this is the first full year that follows the events of 9/11, when insurance risks were seen as increasing significantly.

Longitudinal RPIE data is a highly reliable measure of cost trends over both the short- and long-term because its source is actual empirical data for over 11,000 stabilized buildings. 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. Therefore, the

RPIE data is not current enough to be the only source of cost change information for the RGB to establish annual rent adjustments.

From 1989-90 to 2001-02, cumulative growth in the two indices seem to confirm the accuracy of one another in measuring expense changes for rent stabilized properties. Overall nominal costs measured in the PIOC and in the I&E studies grew within three percentage points of each other, increasing, according to the I&E, by 70% and, according to the PIOC, by 67% in stabilized buildings over this period.

Operating Cost Ratios

Between 2001 and 2002, the proportion of gross income spent on audited expenses (the O&M Cost-to-Income ratio) increased by 1.5 percentage points. The proportion of rental income used for audited expenses (the O&M Cost-to-Rent ratio) also increased, up by 1.7 percentage points. This is the third increase in O&M Cost-to-Income and O&M Cost-to-Rent ratios since 1992. In the other years when both ratios increased, 1995-96 and 1999-2000, fuel prices rose sharply. However, this year, the ratios increased despite a drop in fuel costs. The general trend, however, is a decline in the cost to revenue ratios since the early 1990s.

"Distressed" Buildings

Of the buildings in this year's longitudinal sample, 7.0% (770) had O&M expenses that exceeded revenues, 0.7 percentage points higher than the share in last year's longitudinal study. Only 47 (6.1%) distressed properties were built after 1946. The fundamental conditions of these buildings did not change. While rent collections and gross income increased, up a respective 1.5% and 1.7%, operating expenses grew at a faster pace from 2001 to 2002, up 2.5%. Again, distressed properties are burdened by low rents, lack of commercial income, and high operating expenses.

Net Operating Income

Since average operating costs grew slightly more rapidly than revenues during 2002, citywide net operating income in rent stabilized buildings

decreased slightly, by 0.1%. The 0.1% decline was the first decline in NOI since this study began to use computerized records in the 1994 *Income and Expense Study*. Again, NOI refers to the earnings that remain after operating and maintenance (O&M) expenses are taken care of, but before payments in income tax and debt service.

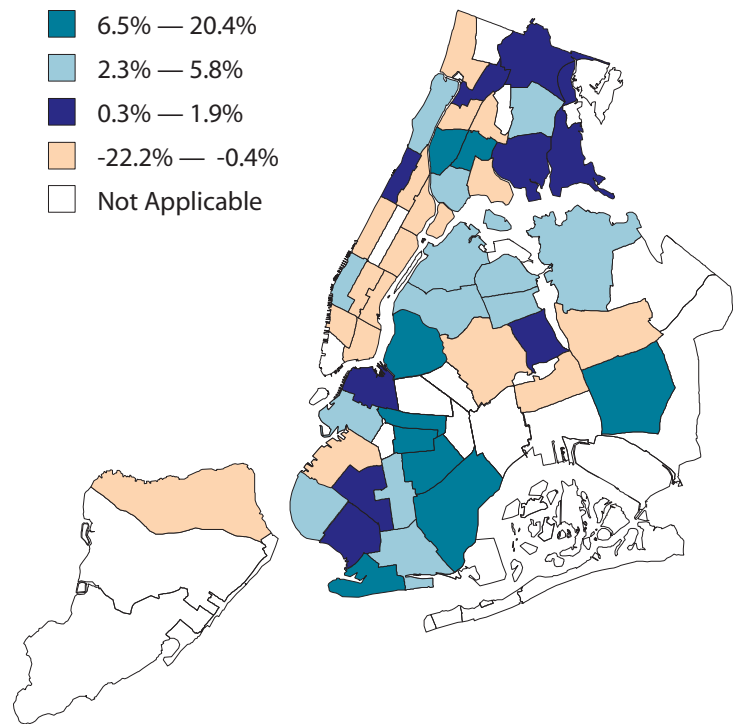
NOI actually grew from 2001 to 2002 among small and medium sized buildings, and only fell among large buildings. NOI rose 2.3% in small buildings (11-19 units) and 1.9% among medium buildings (20-99). However, among large buildings (100 or more units), NOI fell 4.9%. Comparing pre- and post-war structures, small pre-war buildings saw larger increases in NOI than small post-war, while the opposite was true among medium buildings, where the increase in NOI was larger among post-war buildings of this size. Among large buildings, both pre- and post-war structures saw the same 4.9% decline in NOI from 2001-02. See Appendix 9 for a complete breakdown.

Changes in NOI from 2001-02 varied widely among both the boroughs and community districts in each borough. Brooklyn had the highest growth in NOI, at 5.0%, followed by Queens (3.0%) and the Bronx (0.4%). Meanwhile, Manhattan overall saw a 2.6% decline in NOI. Specifically, Core Manhattan saw a 3.0% decline in NOI, while upper Manhattan's NOI increased by 1.1%. The City excluding Core Manhattan experienced NOI growth of 1.3%.

At the community district level, as the map on this page shows, three neighborhoods in Brooklyn and one in the Bronx saw double digit increases in NOI from 2001-02. Morrisania in the Bronx increased the most (20.4%), followed by Flatlands-Canarsie (19.2%), Williamsburg/Greenpoint (16.9%) and East Flatbush (10.5%), all in Brooklyn. Meanwhile, three neighborhoods saw double digit declines in NOI, with two in the Bronx and one in Manhattan. The two largest

Change in Net Operating Income 2000-01

NOI decreased in over a third of New York City Neighborhoods from 2001 to 2002



Note: Eleven 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. Community District percent changes are not weighted, borough-level averages are weighted.

Source: NYC Department of Finance, 2002 RPIE Filings

declines were in the Bronx, with Hunts Point/Longwood falling 22.2%, East Tremont by 17.4%, and Midtown Manhattan declining by 11.5%.

Conclusion

The RPIE filings from over 12,000 rent stabilized buildings containing over 600,000 units in the cross-sectional sample, support the trend that the overall financial condition of New York City's rent stabilized properties continued to remain strong in both nominal and real terms in 2002. Revenue collections increased 4.1%, but it was outpaced by the 6.9% increase in costs.

Expense Increases Outpace Growth in Revenue from 2001-2002

(Changes in Average Monthly Rents, Income, Operating Costs and Net Operating Income per Dwelling Unit, 1989-2002)

	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%	8.0%
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%
98-99	5.5%	5.5%	3.5%	8.7%
99-00	6.2%	6.5%	8.4%	3.5%
00-01	4.9%	5.2%	4.8%	5.9%
01-02	4.0%	4.1%	6.9%	-0.1%

Source: NYC Department of Finance, 1990-2002 RPIE Filings

The greater increase in expenses from 2001-02 resulted in an NOI decrease of 0.1% citywide, the first decrease since the I&E Study was first done. The table on this page provides the year-to-year changes in rents, income, costs, and NOI since 1990. After adjusting for inflation, in 2002, owners of rent stabilized buildings generally earned less income (on average, 50 cents per unit per month) after operating and maintenance expenses were paid than the year before.

Methodology

The information in this report was generated from summaries of raw data from RPIE forms filed with the NYC Department of Finance in 2003 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 2002, was computerized in late 2003 (the form is not due until September), and made available to RGB research staff in early 2004 for analysis.

As in past studies, two types of summarized data, cross-sectional and longitudinal, were obtained for stabilized buildings. Cross-sectional data, which

provides a "snapshot" or "moment in time" view, comes from properties that filed 2002 RPIE forms. This data is used to compute average rents, operating costs, etc. that are typical of the year 2002. Longitudinal data, which provides a direct comparison of identical elements over time, encompasses properties that filed RPIE forms for the years 2001 and 2002. The longitudinal data describes changing conditions in average rents, operating costs, etc. by comparing 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 2002, while longitudinal data measures changes in conditions that occurred from 2001 to 2002.

This year, 12,346 rent stabilized apartment buildings were analyzed in the cross-sectional study (see Appendix 7) and 11,055 stabilized properties were examined in the longitudinal study (see Appendix 10). The sample of buildings was created by matching a list of properties registered with the DHCR against buildings that filed a 2002 RPIE statement (or 2001 and 2002 statements for the longitudinal sample). A building is considered rent stabilized if it contains at

least one rent stabilized unit. Unlike last year's study, the number of buildings in both the cross-sectional and the longitudinal sample decreased from the previous year. The cross-sectional sample decreased by 739 buildings (6%) and the longitudinal sample decreased by 228 buildings (2%).

Once the two samples were drawn, properties that met the following criteria were removed:

- 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 did not file a 2002 RPIE form for the cross-sectional study, or a 2001 and a 2002 RPIE form for the longitudinal study;
- No unit count could be found in RPIE records;
- No apartment rent figures were recorded on the RPIE forms. In these cases, forms were improperly completed or the building was vacant.

Three additional methods were used to screen the samples so properties with inaccurate building information could be removed to protect the integrity of the samples:

- In early I&E studies, the 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 samples. This year, 117 buildings were removed from both samples for this reason. Sixty percent of these buildings (70) had average rents below \$100 per month, and forty percent (47) had average rents in excess of the upper limits. Such screening for outliers is critical since such deviations may reflect data entry errors and thus could skew the analysis.
- Buildings in which operating costs exceeded income by more than 300% were excluded from both samples. Four properties were excluded 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 (e.g. structures with 20-99 units built in Brooklyn before 1947). Staten Island is not included in most of the borough-level analysis because it contains too few stabilized buildings in most size and age categories to calculate reliable statistics.

For the fourth year, the Department of Finance provided research staff with data summarized at the sub-borough level in Manhattan this year. Manhattan properties were grouped into two categories, "Core Manhattan"—properties south of East 96th Street or West 110th Streets, or "Upper Manhattan"—the remaining areas. Where possible, researchers provided figures for Upper and Core Manhattan and for the "rest of the City" (New York City excluding Core Manhattan). The extremely tight real estate market in Core Manhattan often results in income and expense data that is different from other areas of New York City. Thus, this added bifurcation allows separate examination of what are often two very different economic conditions in Core Manhattan and the rest of the City. All data in both the cross-sectional and longitudinal analysis is weighted using 1999 HVS allocations, the best estimate available of the real distribution of stabilized apartments in New York City. □

Endnotes

1. RPIE rent figures include 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.
2. Pre-war buildings refer to those built before 1947; post-war buildings refer to those built after 1946.
3. Mean contract rents for 2002 were computed using the 2002 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 2002 HVS were combined to compute an average rent for all regulated units.
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 often offer preferential rents when the current market cannot bear the legal rent.
5. The year 1989 is used as a base year because that is the first year the RGB received data for a large sample of buildings. Comparisons are made to 2002 data because that is the latest data available.

Appendix: Income and Expense Study

1. Cross-Sectional Income and Expense Study: Estimated Average Operating & Maintenance Cost (2002) per Apartment per Month by Building Size and Location, Structures Built Before 1947

	Taxes	Labor	Fuel	Water/Sewer	Light & Power	Maint.	Admin.	Insurance	Misc.	Total
Citywide	\$119	\$59	\$49	\$32	\$20	\$111	\$68	\$34	\$50	\$543
11-19 units	\$153	\$36	\$58	\$36	\$22	\$127	\$76	\$40	\$63	\$611
20-99 units	\$108	\$54	\$48	\$32	\$17	\$108	\$63	\$34	\$46	\$510
100+ units	\$158	\$122	\$43	\$28	\$37	\$117	\$93	\$28	\$60	\$686
Bronx	\$66	\$46	\$53	\$33	\$17	\$102	\$52	\$38	\$39	\$447
11-19 units	\$70	\$39	\$68	\$39	\$27	\$131	\$48	\$44	\$64	\$530
20-99 units	\$67	\$44	\$52	\$33	\$17	\$100	\$52	\$38	\$38	\$440
100+ units	\$56	\$82	\$47	\$35	\$17	\$99	\$55	\$35	\$31	\$456
Brooklyn	\$86	\$39	\$49	\$31	\$16	\$90	\$50	\$31	\$39	\$433
11-19 units	\$92	\$24	\$64	\$35	\$18	\$110	\$58	\$36	\$58	\$494
20-99 units	\$85	\$39	\$48	\$30	\$15	\$88	\$49	\$31	\$37	\$422
100+ units	\$89	\$61	\$40	\$30	\$16	\$83	\$47	\$27	\$33	\$426
Manhattan	\$170	\$82	\$48	\$31	\$25	\$133	\$92	\$34	\$65	\$680
11-19 units	\$215	\$45	\$53	\$36	\$25	\$140	\$99	\$43	\$70	\$725
20-99 units	\$150	\$73	\$47	\$32	\$19	\$130	\$82	\$34	\$60	\$627
100+ units	\$217	\$160	\$44	\$25	\$54	\$137	\$128	\$26	\$81	\$870
Queens	\$106	\$43	\$46	\$30	\$15	\$90	\$51	\$32	\$34	\$448
11-19 units	\$101	\$19	\$58	\$31	\$13	\$95	\$39	\$32	\$35	\$422
20-99 units	\$106	\$41	\$44	\$31	\$16	\$88	\$53	\$32	\$32	\$443
100+ units	\$119	\$98	\$40	\$28	\$15	\$101	\$51	\$34	\$46	\$531
Staten Island*	-	-	-	-	-	-	-	-	-	-
Core Man	\$224	\$96	\$43	\$30	\$30	\$138	\$107	\$33	\$75	\$775
11-19 units	\$229	\$45	\$50	\$35	\$24	\$136	\$99	\$43	\$71	\$731
20-99 units	\$212	\$82	\$41	\$30	\$20	\$137	\$97	\$33	\$70	\$722
100+ units	\$250	\$180	\$42	\$24	\$62	\$144	\$142	\$25	\$92	\$962
Upper Man	\$73	\$61	\$57	\$34	\$20	\$127	\$68	\$36	\$49	\$524
11-19 units	\$72	\$51	\$82	\$41	\$29	\$175	\$104	\$45	\$68	\$667
20-99 units	\$73	\$61	\$55	\$34	\$18	\$122	\$64	\$35	\$48	\$510
100+ units	\$65	\$68	\$54	\$26	\$19	\$102	\$61	\$27	\$32	\$455
City w/o Core Manhattan	\$79	\$46	\$52	\$32	\$17	\$102	\$54	\$35	\$40	\$457

* The number of Pre-47 rent stabilized buildings in Staten Island was too small to calculate reliable statistics.

Notes: 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 (2002) per Apartment per Month by Building Size and Location, Structures Built After 1946

	Taxes	Labor	Fuel	Water/Sewer	Light & Power	Maint.	Admin.	Insurance	Misc.	Total
Citywide	\$170	\$106	\$38	\$29	\$29	\$108	\$81	\$28	\$54	\$644
11-19 units	\$167	\$25	\$40	\$30	\$26	\$117	\$71	\$35	\$57	\$569
20-99 units	\$124	\$66	\$40	\$30	\$24	\$98	\$61	\$29	\$43	\$516
100+ units	\$219	\$153	\$36	\$27	\$34	\$118	\$103	\$28	\$65	\$784
Bronx*	\$105	\$65	\$42	\$31	\$23	\$88	\$58	\$33	\$46	\$492
11-19 units	-	-	-	-	-	-	-	-	-	-
20-99 units	\$95	\$54	\$45	\$30	\$21	\$90	\$55	\$34	\$43	\$468
100+ units	-	-	-	-	-	-	-	-	-	-
Brooklyn*	\$107	\$75	\$43	\$30	\$22	\$103	\$62	\$29	\$45	\$515
11-19 units	-	-	-	-	-	-	-	-	-	-
20-99 units	\$107	\$64	\$44	\$31	\$20	\$104	\$60	\$28	\$45	\$502
100+ units	\$104	\$110	\$41	\$27	\$27	\$98	\$67	\$29	\$45	\$547
Manhattan	\$327	\$186	\$35	\$25	\$38	\$134	\$140	\$30	\$84	\$999
11-19 units	\$250	\$24	\$42	\$30	\$33	\$143	\$110	\$38	\$109	\$780
20-99 units	\$229	\$89	\$30	\$27	\$25	\$119	\$93	\$26	\$59	\$698
100+ units	\$359	\$219	\$36	\$25	\$42	\$139	\$156	\$31	\$92	\$1,097
Queens	\$127	\$85	\$37	\$30	\$28	\$100	\$62	\$26	\$43	\$537
11-19 units	\$136	\$32	\$42	\$29	\$24	\$97	\$59	\$32	\$33	\$483
20-99 units	\$121	\$66	\$39	\$30	\$27	\$90	\$55	\$28	\$38	\$495
100+ units	\$131	\$111	\$34	\$29	\$29	\$110	\$69	\$24	\$47	\$585
St. Island*	\$102	\$79	\$42	\$29	\$23	\$125	\$53	\$28	\$42	\$522
20+ units	\$94	\$85	\$43	\$29	\$22	\$126	\$50	\$28	\$40	\$502
Core Man	\$350	\$189	\$34	\$25	\$38	\$139	\$146	\$30	\$86	\$1,039
11-19 units	-	-	-	-	-	-	-	-	-	-
20-99 units	\$257	\$95	\$28	\$27	\$25	\$127	\$102	\$25	\$62	\$747
100+ units	\$381	\$223	\$36	\$25	\$42	\$143	\$160	\$31	\$93	\$1,134
Upper Man*	\$85	\$148	\$41	\$21	\$39	\$83	\$88	\$25	\$69	\$599
City w/o Core Manhattan	\$114	\$83	\$39	\$30	\$26	\$98	\$62	\$28	\$44	\$524

* The number of Post-46 rent stabilized buildings with fewer than 20 units in the Bronx, Brooklyn, Staten Island, Core and Upper Manhattan as well as buildings with 20-99 and 100+ units in Upper Manhattan were too small to calculate reliable statistics.

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 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.

3. Cross-Sectional Income and Expense Study, Estimated Average Rent and Income (2002) per Apartment per Month by Building Size and Location

	Post-46			Pre-47			All		
	Rent	Income	Costs	Rent	Income	Costs	Rent	Income	Costs
Citywide	\$990	\$1,088	\$644	\$760	\$848	\$543	\$821	\$912	\$570
11-19 units	\$785	\$911	\$569	\$754	\$954	\$611	\$757	\$951	\$608
20-99 units	\$758	\$804	\$515	\$726	\$792	\$510	\$733	\$795	\$511
100+ units	\$1,247	\$1,398	\$784	\$1,003	\$1,105	\$686	\$1,153	\$1,284	\$746
Bronx	\$714	\$750	\$492	\$587	\$614	\$448	\$608	\$637	\$455
11-19 units	-	-	-	\$585	\$640	\$530	\$578	\$629	\$516
20-99 units	\$655	\$679	\$468	\$585	\$611	\$440	\$594	\$619	\$443
100+ units	-	-	-	\$613	\$633	\$456	\$706	\$736	\$487
Brooklyn	\$712	\$747	\$515	\$627	\$651	\$433	\$643	\$669	\$449
11-19 units	-	-	-	\$640	\$698	\$494	\$646	\$709	\$496
20-99 units	\$695	\$731	\$502	\$620	\$638	\$422	\$639	\$661	\$442
100+ units	\$752	\$780	\$547	\$654	\$677	\$426	\$696	\$721	\$479
Manhattan	\$1,695	\$1,956	\$999	\$949	\$1,120	\$680	\$1,081	\$1,268	\$736
11-19 units	\$1,036	\$1,289	\$780	\$880	\$1,220	\$725	\$885	\$1,222	\$727
20-99 units	\$1,122	\$1,261	\$698	\$892	\$1,025	\$627	\$908	\$1,041	\$632
100+ units	\$1,884	\$2,184	\$1,097	\$1,276	\$1,442	\$870	\$1,601	\$1,839	\$992
Queens	\$784	\$832	\$537	\$687	\$713	\$448	\$745	\$783	\$501
11-19 units	\$683	\$740	\$483	\$612	\$632	\$422	\$629	\$658	\$436
20-99 units	\$745	\$783	\$495	\$691	\$718	\$443	\$720	\$752	\$470
100+ units	\$829	\$884	\$585	\$767	\$791	\$531	\$822	\$874	\$579
St. Island	\$716	\$751	\$509	-	-	-	\$716	\$751	\$509
Core Man	\$1,771	\$2,053	\$1,039	\$1,119	\$1,334	\$775	\$1,262	\$1,492	\$833
11-19 units	-	-	-	\$897	\$1,257	\$731	\$904	\$1,260	\$734
20-99 units	\$1,215	\$1,374	\$747	\$1,081	\$1,259	\$722	\$1,095	\$1,271	\$724
100+ units	\$1,959	\$2,278	\$1,134	\$1,420	\$1,611	\$962	\$1,700	\$1,957	\$1,051
Upper Man	\$873	\$927	\$600	\$665	\$750	\$524	\$683	\$765	\$531
11-19 units	-	-	-	\$719	\$869	\$667	\$719	\$869	\$667
20-99 units	-	-	-	\$661	\$739	\$510	\$662	\$739	\$510
100+ units	-	-	-	\$623	\$679	\$455	\$805	\$860	\$563
City w/o Core Manhattan	\$758	\$801	\$524	\$627	\$665	\$457	\$664	\$703	\$476

Notes: City and borough totals are weighted, while figures for building size categories are unweighted. Cost figures in this table are NOT adjusted for the results of the 1992 Department of Finance audit on I&E reported operating costs. The number of Post-46 rent stabilized buildings with fewer than 20 units in the Bronx, Brooklyn, Staten Island, Core and Upper Manhattan as well as buildings with 20-99 and 100+ units in Upper Manhattan were too small to calculate reliable statistics, as was the number of Pre-47 buildings in Staten Island. Borough averages without building size figures for Post-46 Staten Island are provided.

Source: NYC Department of Finance, RPIE Filings.

4. Cross-Sectional Income and Expense Study, Net Operating Income in 2002 per Apartment per Month by Building Size and Location

	Post-46	Pre-47	All		Post-46	Pre-47	All
Citywide	\$444	\$305	\$342	Core Man	\$1,014	\$559	\$659
11-19 units	\$343	\$343	\$343	11-19 units	-	\$525	\$526
20-99 units	\$289	\$282	\$283	20-99 units	\$627	\$537	\$547
100+ units	\$614	\$419	\$538	100+ units	\$1,144	\$648	\$906
Bronx	\$258	\$167	\$182	Upper Man	\$328	\$226	\$234
11-19 units	-	\$109	\$113	11-19 units	-	\$201	\$201
20-99 units	\$211	\$171	\$176	20-99 units	-	\$229	\$230
100+ units	-	\$177	\$249	100+ units	-	\$224	\$297
Brooklyn	\$232	\$217	\$220	City w/o Core	\$277	\$208	\$227
11-19 units	-	\$203	\$213				
20-99 units	\$229	\$215	\$218				
100+ units	\$233	\$250	\$243				
Manhattan	\$957	\$440	\$532				
11-19 units	\$509	\$495	\$495				
20-99 units	\$562	\$399	\$410				
100+ units	\$1,086	\$571	\$847				
Queens	\$295	\$265	\$282				
11-19 units	\$257	\$211	\$222				
20-99 units	\$288	\$275	\$282				
100+ units	\$299	\$259	\$295				
St. Island	\$241	\$0	\$241				

Notes: City and borough totals are weighted, while figures for building size categories are unweighted. Cost figures in this table are NOT adjusted for the results of the 1992 Department of Finance audit on I&E reported operating costs. The number of Post-46 rent stabilized buildings with fewer than 20 units in the Bronx, Brooklyn, Staten Island and Upper Manhattan as well as buildings with 20-99 and 100+ units in Upper Manhattan were too small to calculate reliable statistics, as was the number of Pre-47 buildings in Staten Island. Borough averages without building size figures for Post-46 Staten Island are provided.

Source: NYC Department of Finance, RPIE Filings.

5. Cross-Sectional Distribution of Operating Costs in 2002, by Building Size and Age

	Taxes	Maint.	Labor	Admin.	Utilities	Fuel	Misc.	Insurance	Total
Pre-47	22.0%	20.5%	10.9%	12.6%	9.5%	9.0%	9.1%	6.3%	100.0%
11-19 units	25.1%	20.7%	5.9%	12.5%	9.4%	9.5%	10.3%	6.6%	100.0%
20-99 units	21.1%	21.2%	10.6%	12.4%	9.6%	9.5%	9.0%	6.7%	100.0%
100+ units	23.0%	17.0%	17.7%	13.6%	9.4%	6.3%	8.8%	4.1%	100.0%
Post-46	26.5%	16.8%	16.5%	12.6%	8.9%	5.9%	8.4%	4.4%	100.0%
11-19 units	29.4%	20.5%	4.5%	12.6%	9.9%	7.0%	10.0%	6.2%	100.0%
20-99 units	24.2%	19.0%	12.9%	11.8%	10.5%	7.8%	8.3%	5.6%	100.1%
100+ units	27.9%	15.1%	19.5%	13.2%	7.8%	4.6%	8.3%	3.6%	100.0%
All Bldgs.	23.3%	19.4%	12.6%	12.6%	9.3%	8.1%	8.9%	5.7%	100.0%
11-19 units	25.4%	20.7%	5.8%	12.5%	9.4%	9.3%	10.3%	6.6%	100.0%
20-99 units	21.4%	21.0%	10.7%	12.4%	9.6%	9.4%	8.9%	6.6%	100.0%
100+ units	23.4%	16.8%	17.9%	13.6%	9.3%	6.2%	8.8%	4.0%	100.0%

Source: NYC Department of Finance, RPIE Filings.

6. Cross-Sectional Distribution of "Distressed" Buildings, 2002 RPIE Filings

Pre-47	Citywide	Bronx	Brooklyn	Manhattan	Queens	Staten Island	Core Man	Upper Man
11-19 units	267	42	53	147	23	2	120	27
20-99 units	596	225	106	236	28	1	107	129
100+ units	18	3	0	15	0	0	8	7
All	881	270	159	398	51	3	235	163

Post-46	Citywide	Bronx	Brooklyn	Manhattan	Queens	St. Island	Core Man	Upper Man
11-19 units	13	4	1	6	2	0	5	1
20-99 units	31	12	8	3	7	1	2	1
100+ units	7	0	3	2	2	0	1	1
All	51	16	12	11	11	1	8	3

All Bldgs.	Citywide	Bronx	Brooklyn	Manhattan	Queens	St. Island	Core Man	Upper Man
11-19 units	280	46	54	153	25	2	125	28
20-99 units	627	237	114	239	35	2	109	130
100+ units	25	3	3	17	2	0	9	8
All	932	286	171	409	62	4	243	166

Source: NYC Department of Finance, RPIE Filings.

7. Cross-Sectional Sample, 2002 RPIE Filings

	Post-46		Pre-47		All	
	Bldgs.	DU's	Bldgs.	DU's	Bldgs.	DU's
Citywide	1,441	158,517	10,905	442,144	12,346	600,661
11-19 units	118	1,761	2,527	38,178	2,645	39,939
20-99 units	824	48,562	7,994	333,847	8,818	382,409
100+ units	499	108,194	384	70,119	883	178,313
Bronx	217	15,085	2,180	106,912	2,465	121,997
11-19 units	11	156	186	2,758	197	2,914
20-99 units	177	10,477	1,994	93,027	2,171	103,504
100+ units	29	4,452	68	11,127	97	15,579
Brooklyn	275	26,883	2,284	92,095	2,559	118,978
11-19 units	12	179	469	7,093	481	7,272
20-99 units	187	12,420	1,755	77,737	1,942	90,157
100+ units	76	14,284	60	7,265	136	21,549
Manhattan	390	62,716	5,131	192,117	5,521	254,833
11-19 units	36	555	1,560	23,541	1,596	24,096
20-99 units	163	8,342	3,373	124,822	3,536	133,164
100+ units	191	53,819	198	43,754	389	97,573
Queens	503	49,879	1,224	50,184	1,727	100,063
11-19 units	46	683	306	4,684	352	5,367
20-99 units	267	16,122	863	37,857	1,130	53,979
100+ units	190	33,074	55	7,643	245	40,717
St. Island	56	3,954	18	836	74	4,790
11-19 units	13	188	6	102	19	290
20-99 units	30	1,201	9	404	39	1,605
100+ units	13	2,565	3	330	16	2,895
Core Man	347	57,293	3,643	125,856	3,990	183,149
11-19 units	33	509	1,416	21,333	1,449	21,842
20-99 units	136	6,812	2,085	68,696	2,221	75,508
100+ units	178	49,972	142	35,827	320	85,799
Upper Man	43	5,423	1,488	66,261	1,531	71,684
11-19 units	3	46	144	2,208	147	2,254
20-99 units	27	1,530	1,288	56,126	1,315	57,656
100+ units	13	3,847	56	7,927	69	11,774

Source: NYC Department of Finance, RPIE Filings.

8. Longitudinal Income and Expense Study, Estimated Average Rent and Income Changes (2001-2002) by Building Size and Location

	Post-46			Pre-47			All		
	Rent	Income	Costs	Rent	Income	Costs	Rent	Income	Costs
Citywide	2.7%	3.1%	6.7%	4.6%	4.6%	7.0%	4.0%	4.1%	6.9%
11-19 units	1.6%	1.2%	1.5%	5.3%	5.8%	7.8%	5.0%	5.4%	7.2%
20-99 units	4.5%	4.4%	5.6%	4.8%	4.9%	6.7%	4.8%	4.8%	6.5%
100+ units	1.1%	1.8%	7.7%	3.2%	2.3%	7.6%	1.8%	2.0%	7.7%
Bronx	3.4%	2.9%	5.0%	4.9%	5.2%	7.0%	4.6%	4.8%	6.6%
11-19 units	-	-	-	8.8%	9.6%	10.0%	8.2%	9.0%	9.7%
20-99 units	3.2%	2.3%	5.6%	5.0%	5.4%	6.9%	4.8%	4.9%	6.7%
100+ units	-	-	-	-0.3%	-0.1%	4.7%	2.1%	2.2%	4.8%
Brooklyn	4.6%	5.4%	4.8%	5.4%	5.5%	5.9%	5.2%	5.4%	5.6%
11-19 units	-	-	-	7.0%	7.6%	8.9%	7.3%	7.5%	8.7%
20-99 units	4.5%	5.6%	5.1%	5.1%	5.1%	5.3%	4.9%	5.2%	5.2%
100+ units	5.3%	5.2%	4.3%	5.2%	5.0%	5.4%	5.2%	5.2%	4.7%
Manhattan	-0.4%	0.6%	8.3%	4.2%	4.1%	7.5%	2.9%	3.1%	7.7%
11-19 units	-3.2%	-1.6%	-1.0%	4.2%	4.8%	7.0%	3.9%	4.6%	6.7%
20-99 units	3.7%	2.3%	4.8%	4.6%	4.6%	7.4%	4.5%	4.4%	7.2%
100+ units	-1.0%	0.3%	9.1%	3.1%	2.0%	8.3%	0.5%	0.9%	8.8%
Queens	4.8%	4.8%	6.1%	5.1%	5.3%	6.0%	4.9%	5.0%	6.1%
11-19 units	5.2%	4.0%	1.1%	5.3%	5.3%	7.2%	5.3%	4.9%	5.5%
20-99 units	5.3%	5.3%	6.1%	5.1%	5.3%	5.6%	5.2%	5.3%	5.9%
100+ units	4.4%	4.4%	6.4%	5.0%	5.1%	7.9%	4.5%	4.5%	6.6%
Staten Island	4.9%	3.7%	6.3%	-	-	-	4.9%	3.7%	6.3%
Core Manhattan‡	-0.5%	0.5%	8.3%	3.7%	3.4%	7.4%	2.3%	2.5%	7.6%
11-19 units	-	-	-	1.9%	2.8%	5.1%	1.7%	2.6%	4.8%
20-99 units	3.6%	2.1%	5.2%	4.1%	4.1%	7.3%	4.1%	3.8%	7.1%
100+ units	-1.2%	0.3%	9.1%	3.4%	2.2%	8.8%	0.6%	1.0%	9.0%
Upper Manhattan‡	1.0%	1.7%	8.5%	5.9%	6.1%	8.0%	5.3%	5.7%	8.1%
11-19 units	-	-	-	13.9%	14.8%	14.3%	14.0%	14.9%	14.3%
20-99 units	4.3%	4.7%	0.6%	5.6%	5.7%	7.6%	5.5%	5.7%	7.5%
100+ units	-	-	-	-2.6%	-3.1%	1.4%	-0.7%	-0.3%	7.1%
All City w/o Core Manhattan	4.3%	3.1%	5.9%	5.4%	5.6%	6.8%	5.0%	4.8%	6.6%

Notes: City and borough totals are weighted, while figures for building size categories are unweighted. Cost figures in this table are NOT adjusted for the results of the 1992 Department of Finance audit on I&E reported operating costs. The number of post-46 rent stabilized buildings with fewer than 20 units in the Bronx, Brooklyn, Core and Upper Manhattan as well as buildings with 20-99 units and 100+ units in Upper Manhattan were too small to calculate reliable statistics as was the number of Pre-47 buildings in Staten Island. Borough averages without building size figures for Staten Island are provided.

‡ The data for Core and Upper Manhattan on this chart combine two calculations of rents, income and costs in all their respective categories to take into account inconsistencies between the all-Manhattan values and the combination of the Core and Upper Manhattan figures.

Source: NYC Department of Finance, RPIE Filings.

9. Longitudinal Income and Expense Study, Net Operating Income Changes (2001-2002) by Building Size and Location

	Post-46	Pre-47	All		Post-46	Pre-47	All
Citywide	-1.7%	0.7%	-0.1%	Core Manhattan	-6.3%	-1.2%	-3.0%
11-19 units	0.8%	2.4%	2.3%	11-19 units	-	0.7%	0.5%
20-99 units	2.4%	1.8%	1.9%	20-99 units	-1.7%	-0.1%	-0.3%
100+ units	-4.9%	-4.9%	-4.9%	100+ units	-7.1%	-5.0%	-6.4%
Bronx	-1.0%	0.8%	0.4%	Upper Manhattan	-8.7%	2.5%	1.1%
11-19 units	-	7.6%	6.1%	11-19 units	-	17.3%	17.3%
20-99 units	-4.6%	1.6%	0.6%	20-99 units	12.2%	1.8%	2.0%
100+ units	-	-10.1%	-2.3%	100+ units	--	-9.4%	-11.0%
Brooklyn	6.7%	4.6%	5.0%	All City w/o Core Manhattan	-2.0%	3.0%	1.3%
11-19 units	-	4.8%	4.8%				
20-99 units	6.7%	4.7%	5.2%				
100+ units	7.1%	4.2%	6.2%				
Manhattan	-6.4%	-0.8%	-2.6%				
11-19 units	-2.5%	1.8%	1.6%				
20-99 units	-0.7%	0.5%	0.4%				
100+ units	-7.2%	-6.1%	-6.9%				
Queens	2.3%	4.1%	3.0%				
11-19 units	9.8%	1.7%	3.8%				
20-99 units	4.0%	4.9%	4.4%				
100+ units	0.5%	-0.1%	0.5%				
St. Island	-1.5%		-1.5%				

Notes: City and borough totals are weighted, while figures for building size categories are unweighted. Cost figures in this table are NOT adjusted for the results of the 1992 Department of Finance audit on I&E reported operating costs. The number of post-46 rent stabilized buildings with fewer than 20 units in the Bronx, Brooklyn, Core and Upper Manhattan as well as buildings with 20-99 units and 100+ units in Upper Manhattan were too small to calculate reliable statistics as was the number of Pre-47 buildings in Staten Island. Borough averages without building size figures for Staten Island are provided.

Source: NYC Department of Finance, RPIE Filings.

10. Longitudinal Sample, 2001 & 2002 RPIE Filings

	Post-46		Pre-47		All	
	Bldgs.	DU's	Bldgs.	DU's	Bldgs.	DU's
Citywide	1,328	146,317	9,727	401,205	11,055	547,522
11-19 units	99	1,490	2,116	32,098	2,215	33,588
20-99 units	770	45,629	7,267	306,246	8,037	351,875
100+ units	459	99,198	344	62,861	803	162,059
Bronx	204	14,396	2,035	96,985	2,239	111,381
11-19 units	10	144	149	2,232	159	2,376
20-99 units	166	9,930	1,823	85,176	1,989	95,106
100+ units	28	4,322	63	9,577	91	13,899
Brooklyn	256	24,884	2,002	83,430	2,258	108,314
11-19 units	10	149	361	5,439	371	5,588
20-99 units	175	11,626	1,588	71,655	1,763	83,281
100+ units	71	13,109	53	6,336	124	19,445
Manhattan	364	59,175	4,567	173,648	4,931	232,823
11-19 units	34	531	1,333	20,219	1,367	20,750
20-99 units	150	7,704	3,059	114,015	3,209	121,719
100+ units	180	50,940	175	39,414	355	90,354
Queens	457	44,373	1,109	46,402	1,566	90,775
11-19 units	37	553	268	4,122	305	4,675
20-99 units	251	15,286	790	35,076	1,041	50,362
100+ units	169	28,534	51	7,204	220	35,738
St. Island	47	3,489	14	740	61	4,229
11-19 units	8	113	5	86	13	199
20-99 units	28	1,083	7	324	35	1,407
100+ units	11	2,293	2	330	13	2,623
Core Manhattan	324	53,926	3,235	114,222	3,559	168,148
11-19 units	31	485	1,218	18,456	1,249	18,941
20-99 units	126	6,348	1,885	62,228	2,011	68,576
100+ units	167	47,093	132	33,538	299	80,631
Upper Manhattan	40	5,249	1,332	59,426	1,372	64,675
11-19 units	3	46	115	1,763	118	1,809
20-99 units	24	1,356	1,174	51,787	1,198	53,143
100+ units	13	3,847	43	5,876	56	9,723

Source: NYC Department of Finance, RPIE Filings.