

## 2004 Price Index of Operating Costs

April 27, 2004

### board members

**Chair:**

Marvin Markus

**Public Members:**

Betty Phillips Adams  
Gale D. Kaufman  
Elizabeth Lusskin, Esq.  
Martin A. Zelnik, RA

**Owner Members:**

Harold A. Lubell, Esq.  
Steven J. Schleider

**Tenant Members:**

Adriene L. Holder, Esq.  
David D. Pagan

### staff members

**Executive Director:**

Andrew McLaughlin

**Research Associates:**

Brian Hoberman  
Danielle Burger

**Office Manager:**

Leon Klein

**Public Information:**

Charmaine Frank

**PIOC Temp Manager:**

Shirley Alexander

# 2004 Price Index Of Operating Costs

## what's new

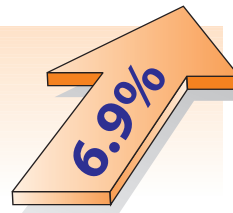
- ✓ The Price Index of Operating Costs for Rent Stabilized Apartment Buildings (PIOC) increased 6.9% this year.
- ✓ Costs in pre-war buildings increased 6.4% and costs in post-war buildings rose 6.9%.
- ✓ The “core” PIOC, which excludes the erratic changes in fuel oil prices, natural gas, and electricity costs, is useful for analyzing inflationary trends. The core rose by 9.2% this year.
- ✓ Fuel oil costs decreased -2.8%.
- ✓ Real estate taxes rose 16.2%, due to the strong rise in assessments and the increase in the tax rate.
- ✓ Labor Costs rose 4.5%.
- ✓ The Utilities component increased by 0.8% due primarily to increases in water and sewer costs.
- ✓ Insurance Costs grew by 14.7%.
- ✓ The Price Index of Operating Costs for Rent Stabilized Apartment Buildings is projected to increase 3.6% next year.

## Introduction

The Price Index of Operating Costs (PIOC) measures the price change in a market basket of goods and services used in the operation and maintenance of rent stabilized apartment buildings in New York City. The goods and services which make up the market basket were originally selected on the basis of the findings of a study of 1969 expenditure patterns by owners of rent stabilized apartment buildings. Minor changes in the specification of some of these goods and services have been carried out over time to maintain the representativeness of the market basket. The relative importance of the various goods and services in the market basket was updated in 1983 by means of a study of expenditure patterns of owners of rent stabilized apartment buildings.

The PIOC was maintained by the Bureau of Labor Statistics (BLS) from 1970 to 1981. From 1982 to 1990, private consulting firms prepared the PIOC. In 1991, the Rent Guidelines Board (RGB) staff's growing expertise and familiarity made it possible to move the PIOC “in house.”

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



The PIOC measures changes in the cost of purchasing a specified set of goods and services, which must remain constant both in terms of quantity and quality from one year to the next. The need to exclude the effect of any alterations in the quality of services provided requires that very careful specifications of the goods and services priced must be developed and applied. The pricing specifications must permit the measurement of changes in prices paid for carefully defined pricing units with specific terms of sale, such as cash, volume or trade discounts. For certain items, such as real estate taxes, the price paid is determined administratively, through information collected from City records.

Changes in the overall PIOC result from changes in the prices of individual goods and services, each weighted by its relative importance as a percentage of total operating and maintenance expenditures. Because the market basket is fixed in the sense that the quantities of goods and services of each kind remain constant, the relative importance of the various goods and services will change when their prices increase either more quickly or more slowly than average. Thus, the relative importance, or weight, attached to each good or service changes from year to year to reflect the different rates of price change among the various index items. The expenditure weights used in the construction of the 2004 Price Index are based upon the 1983 Expenditure Study and revised on the basis of the annually measured price changes from 1982-2003.

## terms and definitions

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

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

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

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

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

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

The importance of each index component is shown by its "expenditure weight" (see Appendix 2). The measured 2003-04 price changes in each index component are also presented in this table. The expenditure weights and the 2003-04 price changes are then combined to provide the overall change in the PIOC over the period from 2003-04.

The 1983 Expenditure Study provides a basis for calculating separate sets of expenditure weights for buildings constructed before 1947 and for buildings constructed in 1947 or later (post-1946). Typically, buildings constructed before 1947 incur a lower percentage of operating and maintenance costs for property taxes, but their fuel costs represent a significantly higher percentage of total operating and maintenance costs than do the fuel costs of the post-1946 buildings. The differences between the pre-1947 and post-1946 expenditure patterns for buildings are combined in the construction of the overall PIOC. It is nevertheless possible to develop separate price indices for the pre-1947 and post-1946 buildings. In addition, there are separate price indices for gas-heated, oil-heated and master-metered buildings. Although the expenditure weights for all rent stabilized buildings and for each of the five subcategories of buildings differ, the price changes are the same for each of the six indices. (See Appendices 2 and 3)

The PIOC consists of nine cost components, each designed to measure changes in a category of costs such as fuel, insurance, utilities, etc. The methodology for each component is described in the final section of this report.

## Summary

This year, the PIOC for rent stabilized apartment buildings increased by 6.9%, ten percentage points below the PIOC percent change from the year before (16.9% in 2003). The PIOC was driven upward by the increase in property taxes (16.2%) and escalating insurance costs (14.7%). These increases were offset by the decrease in the cost of fuel (-2.8%) and low to moderate increases in the remaining six cost components that ranged from 0.8% to 4.5%. See the adjacent table and Appendix 2 for changes in costs and prices for all rent stabilized apartment buildings from 2003-04.

The "core" PIOC, which excludes the erratic changes in fuel oil, natural gas and electricity costs, is useful for analyzing long-term inflationary trends. The core PIOC rose by 9.2% this year, propelled mainly by tax and insurance increases, and outpaced the growth in the Consumer Price Index (CPI) (2.96%), by over 6 percentage points.<sup>1</sup>

## apartments

### *Change In Costs for Rent Stabilized Apartment Buildings, April 2003 to April 2004*

Taxes	16.2%
Labor Costs	4.5%
Fuel	-2.8%
Utilities	0.8%
Contractor Services	4.1%
Administrative Costs	4.0%
Insurance Costs	14.7%
Parts and Supplies	1.2%
Replacement Costs	1.0%
<b>All Costs</b>	<b>6.9%</b>

## Price Index Components

### Taxes



The Tax component of the PIOC is based entirely on real estate taxes. The change in tax cost is estimated by comparing aggregate taxes levied on rent stabilized apartment houses in FY 2003 and FY 2004. The tax data was obtained from the New York City Department of Finance.

Real estate taxes for rent stabilized buildings rose this year by 16.2%. The change in taxes was driven both by the strong rise in assessments and the increase in the property tax rate. The tax rate for rent stabilized properties rose by 9.6%. This rate change incorporates the second half of the 18.49% increase implemented July (9.25%) of 2003. This increase in the tax rate outpaced the growth in assessments (6.9%) for the first time since 1997 (see graph below). Changes in tax

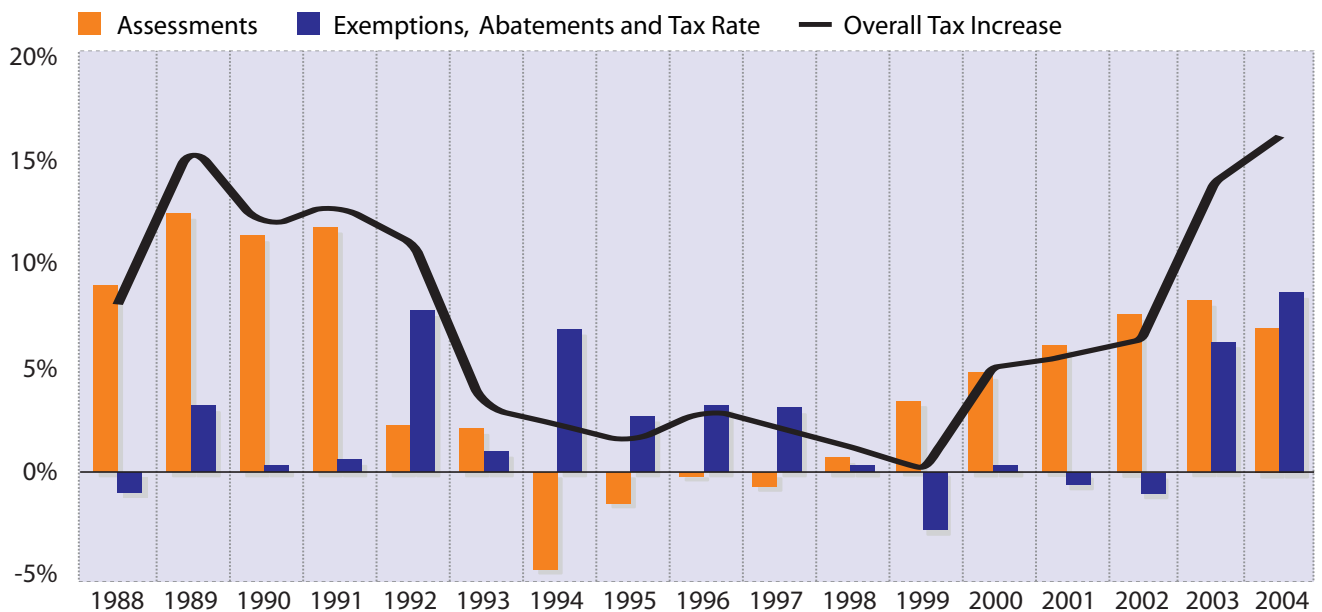
exemptions and abatements had little impact on taxes this year.

**Tax Levy** — The total tax levy for all properties in the City (commercial and residential) increased by 14.6% from FY 2003 to FY 2004, due both to the property tax increase and rising assessments. The Class Two property levy rose higher than that of the City as a whole, at a rate of 16.7%. The distribution of the levy among property classes tends to shift from year to year. During FY 2002 and FY 2003, the tax burden on Class Two properties remained constant at 34.9%. However, from FY 2003 to FY 2004, the levy share for Class Two properties increased, by 0.7 percentage point, to 35.6% of the total tax burden.

**Tax Rate** — The FY 2003 Class 2 rate of 11.541 increased by 9.3% (the second half of the 18.49% tax rate increase implemented in FY 2004), resulting in a new annualized rate of 12.620. This increase follows a 9.2% rise in the tax rate levied in January of FY 2003. This year's rise in the tax rate was preceded by an overall increase of 7.3%

### Percent Change in Taxes due to Assessments and Exemptions/Abatements/Tax Rate 1988-2004

*The Growth in the Tax Rate was Greater than the Growth in Assessments in 2004*



Source: New York City Department of Finance

in FY 2003 and by decreases in the tax rate of 0.5% in FY 2002 and 0.07% in FY 2001.

**Assessments** — The change in the assessed valuations of rent stabilized buildings in New York City has fluctuated following the cycles in the real estate market. Assessments rose dramatically from the late 1980s through 1991, increasing 8% or more each year (see graph on the previous page). In FY 1992 and FY 1993, the increase in valuations for stabilized buildings slowed to 2% per year. The impact of the recession was finally reflected in tax bills the following two years—valuations dropped 4.7% in FY 1994 and 1.3% in FY 1995. Smaller decreases occurred in the next two years. From FY 1998 to 2003, assessments increased each year at a higher rate than the previous year.

In FY 2004, assessments rose by 6.9% citywide. This rise in assessments was not as great as last year's increase, the first time in seven years the increase in assessed valuations was not as high as the year before. All five boroughs showed increases in assessments. Assessments in Manhattan rose 8.8%, more than double the average of the four remaining boroughs (3.8%). Assessments rose 4.6% in the Bronx, 3.3% in Brooklyn, 4.3% in Queens and 3.2% in Staten Island.

**Abatements and Exemptions** — This year, the number of rent stabilized buildings with abatements declined by 4.9%. However, the average benefit value of the typical tax abatement increased by 3.6% from FY 2003 to FY 2004. While the number of properties with tax abatements decreased in every borough, the average value of abatements increased in each borough except Queens. The net impact of the decrease in the number of abatements and the increase in the average abatement value in FY 2004 is a small increase in the tax liability for rent stabilized buildings of approximately 0.04%.

In FY 2004, both the number and value of average tax exemptions increased. Overall, 2.2% more rent stabilized buildings benefited from tax exemptions than in the year before, and the average value of exemptions increased by 7.0% this year. The increase in tax exemptions had a larger impact on the real estate tax component of the PIOC than the change in abatements. For all stabilized properties, the rising number and value of tax exemptions reduced owners' tax bills by about 1.0%. (See Appendices 5 and 6)

## Labor Costs



The Price Index measure of labor costs includes union and non-union salaries and benefits, in addition to Social Security and unemployment insurance. The cost of unionized labor makes up nearly two-thirds of the Labor Costs component. The entire Labor Costs component comprises 15% of the overall Price Index.

Labor Costs rose 4.5%, one percentage point higher than last year's PIOC (3.5%). Unionized wages as a group increased by 2.8%, offsetting the faster growth in non-union pay (5.8%). This is the eleventh consecutive year in which the growth in non-union labor pay outpaced union labor wages. Primarily due to large increases in the cost of health care insurance, employers saw a significant rise in the cost of union benefit contributions of 8.2%. The cost of unemployment insurance increased sharply, up 14% for the second consecutive year, most likely propelled by the continued rise in the New York City unemployment rate.

## Fuel

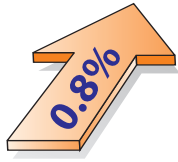


The change in cost measured in the fuel component considers both the change in weather and the change in prices for the three types of heating oil used to heat multi-family buildings in New York City. First, the PIOC measures fuel prices from May to April and then compares them to the same months from the previous year. Fuel oil prices increased slightly by 0.6%. An increase in prices for #2 fuel oil of 3.7% was offset by decreases in prices for #4 and #6 fuel oil of 2.9% and 4.0% respectively.

Second, along with measuring price, the PIOC also takes into account the effect of weather on the demand for fuel oil, especially during the heating season when the large majority of the fuel is burned. Since this year was warmer than last year (although colder than normal), weather decreased the demand for fuel. The combination of the slight increase in heating oil prices and the decrease in demand lowered the cost owners incurred for heating their buildings with oil by 2.8%. This moderate decrease in fuel costs in this year's index

indicates that the cost of heating multi-family buildings was similar to the cost from the previous year.<sup>2</sup>

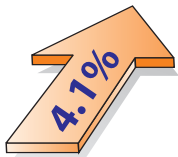
## Utilities



The Utilities component consists primarily of electricity, natural gas, and water and sewer charges. Telephone and steam costs are a small part of the Utilities component. In the case of most Utilities items, changes in costs are measured using the PIOC specifications (i.e. the quantity of electricity, steam, etc. being purchased) and the changes in rate schedules. Water and sewer costs are based on the rate established by the New York City Water Board.

This year, Utilities increased slightly, rising 0.8%, following last year's increase of 21.7%. Gas and electricity costs account for roughly 48% of the Utilities component. Gas cost increased 5.3%, due mainly to an increase in gas prices, while electricity costs decreased sharply by 18.4%. The double-digit decrease in electricity costs was offset by an increase in water and sewer costs of 5.5%. Water and sewer costs account for about half of the Utilities component. Steam costs that decreased 18.9% and telephone costs that increased 5.4% had little impact on the overall Utilities component.

## Contractor Services



The Contractor Services component rose 4.1%, an increase that is 0.7 of a percentage point lower than last year's growth of 4.8%. The most important items in this component by weight are repainting and plumbing rates, which comprise two-thirds of the Contractor Services component.

For the fourth consecutive year, plumbing rates increased more than those for repainting. Plumbers' rates rose by 4.8% while Repainting rates increased by 2.8%. Painters reported that an increase in the cost of labor, materials, insurance and inflation were the factors which led to a higher increase in their services. Plumbers, by contrast, indicated that the increase in their rate was due primarily to the rise in the cost of labor.

Every item in the Contractor Services component experienced some rise in prices or rates for services. Roof Repair showed the highest increase (8.5%) of any item in this component due to a significant rise in the cost of materials. The growth in Range Repair costs had the smallest increase of any item in this component of 1.7%.

## Administrative Costs

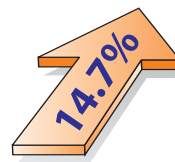


The Administrative Costs component rose 4.0%. For the first time in six years the rate change in this component increased at a rate lower than the previous year. Fees paid to management companies, accountants, and attorneys make up nearly this entire component.

A large portion of the growth in the Administrative Costs component can be attributed to a rise in management company fees (4.0%) that comprise over two-thirds of this component. Management fees are often tied to apartment buildings' rental income and are affected by changes in rents and vacancies. This year's growth is significantly lower than last year's (6.4%), indicating that management companies continue to see increased rents and fewer vacancies in the buildings they manage, but not at the same rate as last year.

Attorney and accounting fees increased at the same rate in this year's PIOC, 3.7%. Both Attorneys' fees and Accountants' fees rose at a faster rate compared to the prior year's increases of 3.2% and 2.8% respectively. Accountants claimed that increases in the cost of living expenses led to higher rates. Attorneys cited the increase in labor costs as the primary reason for raising their rates.

## Insurance Costs



Insurance Costs increased sharply this year by 14.7%, but not nearly as high as last year's dramatic increase in costs of 40.5%. This was a continuation of escalating insurance costs that have risen cumulatively 87% over the past three years. Changes in this component in the fourteen-year period prior to 2002 fluctuated from a decrease of -1.5% to an

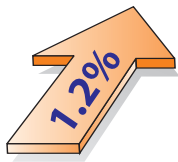


increase of 5.2%. In the mid-80s and the post-9/11 years, the Insurance Costs component has been subject to very high double-digit increases and unlike energy-related items, has never shown commensurately large decreases.

Roughly 19%, or one in five of building owners responding in this year's survey, reported a change in insurance carriers for the surveyed building in the past year. This percentage is down from 24% seen in 2003 and 21% in 2002. Owners who changed carriers experienced a larger rise in costs (15.3%) than owners who remained with the same insurer (14.5%).

Those owners who changed the amount of coverage on their buildings, such as increasing the insured value or adding terrorism coverage, saw a 19.1% rise in cost compared to a 12.3% increase for owners who had the same coverage from year to year. Of the owners that changed the amount of coverage on their renewal policies, 55% increased the amount that the building was insured for while 13% of these owners increased their maximum liability insurance coverage.

## Parts and Supplies



The Parts and Supplies component accounts for roughly two percent of the entire Price Index. The overall increase in the Parts and Supplies component was 1.2%, 0.8 percentage point higher than last year's increase of 0.4% and the highest increase since 2000.

## Replacement Costs



The Replacement Costs component is even less significant than the Parts and Supplies component, its weight being less than 1/100th of the PIOC. This year there was an overall increase in Replacement Costs of 1.0%.

## Rent Stabilized Hotels

The Hotel Price Index includes separate indices for each of three categories of rent stabilized hotels (due to their dissimilar operating cost profiles) and a general index

for all stabilized Hotels. The three categories of hotels are: 1) "traditional" hotels—a multiple dwelling which has amenities such as a front desk, and maid or linen service; 2) Rooming Houses—a multiple dwelling other than a hotel with thirty or fewer sleeping rooms; and, 3) single room occupancy hotels (SROs)—a multiple dwelling in which one or two persons occupy a single room residing separately and independently of other occupants.

The Price Index for all stabilized Hotels increased 6.2% this year, 9.8 percentage points lower than the 16.0% increase found the year before. The Price Index for Hotels was just 0.7 percentage point lower overall than the increase in costs measured in the Apartment Price Index. The primary differences between the increase in the Hotel Index and the Apartment Price Index was in the Tax and Utilities components. The increase in taxes for all types of Hotels was 18.6% overall versus 16.2% in apartment buildings. Utility costs decreased in Hotels by 5.0%, compared to the 0.8% increase for apartments. The difference was due primarily to electricity costs, which decreased in both indexes, but are weighted more heavily in Hotels than in apartments.

Prices in all other components in the Hotel Index had similar changes in rates to the same components in the Apartment Index. Labor Costs increased more rapidly in Hotels (5.2%) versus the 4.5% rise in apartments. Hotels tend to employ more non-union labor than apartment buildings, and non-union labor costs increased at a higher rate than unionized labor costs did this year. Conversely, the rates for Contractor Services did not rise as quickly in Hotels (2.9%) as they did in apartments (4.1%) this year. Because the Contractor Services component is less important in the Hotel Index (accounting for about 9% of the weight) than in the Apartment Index (about 14% of the weight), the lower increase in maintenance rates did not offset the overall Hotel Index significantly. Fuel decreased at a lower rate in the Hotel Index (-2.3%) compared to the 2.8% decrease for apartments.

Changes in these components caused the Price Index for all stabilized Hotels to increase at a similar rate to the Price Index for all stabilized buildings. See the table on the following page for changes in costs and prices for all rent stabilized hotels from 2003-04.

Among the different categories of Hotels, the index for “traditional” hotels increased 7.2%, the index for Rooming Houses increased 5.4%, and SROs increased by 4.4%. The differences between these indices are primarily due to the increased weight placed on the Tax component for “traditional” hotels. (See Appendices 4 and 7)

There was diversity among hotel subgroups in tax expense this year, as real estate taxes increased in “traditional” stabilized hotels by 16.9%, by 20.5% in SROs, and by 17.5% in Rooming Houses. The lower increase in tax burden found for “traditional” hotels this year was caused by the lower tax rate for Hotels (7.6% compared to 9.0% and 9.2% for SROs and Rooming Houses), and a discount in tax bills from exemptions (-1.8%), that was larger than the discount found for SROs (-0.1%) and the almost negligible impact of exemptions on Rooming Houses (0.05%). (See Appendix 5)

## Rent Stabilized Lofts

The increase in the Loft Index this year was 8.2%, 1.3 percentage points higher than the increase for apartments. This difference is explained primarily by the fact that Insurance Costs, which increased by 14.7%, are much more important for lofts than for apartments and placed more upward pressure on the Loft Index. See the adjacent table and Appendix 8 for changes in costs and prices for all rent stabilized lofts from 2003-04.

## The Core PIOC

The Core PIOC (see graph on the following page), which measures long-term local trends by factoring out shifts in fuel costs, gas, and electricity rates, rose 9.2% in 2004. The 9.2% rise in the 2004 Core was 0.2 percentage point lower than last year’s Core PIOC projection of 9.4%. Insurance Costs showed the most variation between the actual (14.7%) and predicted (19.7%) core increases. All of the remaining changes in the core components in the 2004 projection and the actual 2003 core show agreement within 0.9 percentage point.

## PIOC Projections for 2005

Section 26-510 of the Rent Stabilization Law requires the Board to consider the prevailing and projected operating and maintenance costs. Projections for the components of the PIOC are performed to provide the Rent Guidelines Board with an estimate of how much costs are expected to rise in the year following the current Price Index. The PIOC Projection is used in correlation with the old ‘traditional’ commensurate rent adjustment formula only. Before the new commensurate formulas were devised, the projection was used historically to assist the Board in setting guidelines for tenants choosing two- or three-year leases.

It is important to note that changes in costs and prices after April 2004, the last month covered by this study, will be measured in next year’s Price Index. The PIOC Projection is not used in the calculation of the ‘Net Revenue’ and ‘CPI-Adjusted

### hotels

#### *Change In Costs for Rent Stabilized Hotel Buildings, April 2003 to April 2004*

Taxes	18.6%
Labor Costs	5.2%
Fuel	-2.3%
Utilities	-5.0%
Contractor Services	2.9%
Administrative Costs	4.3%
Insurance Costs	14.7%
Parts and Supplies	1.2%
Replacement Costs	0.5%

**All Costs 6.2%**

### lofts

#### *Change In Costs for Rent Stabilized Loft Buildings, April 2003 to April 2004*

Taxes	16.2%
Labor Costs	4.3%
Fuel	-4.3%
Utilities	0.3%
Contractor Services	4.1%
Administrative Costs, Legal	3.7%
Administrative Costs, Other	4.0%
Insurance Costs	14.7%
Parts and Supplies	1.2%
Replacement Costs	1.0%

**All Costs 8.2%**

### projections

#### *Projected Change In Costs for Rent Stabilized Apartment Buildings, April 2004 to April 2005*

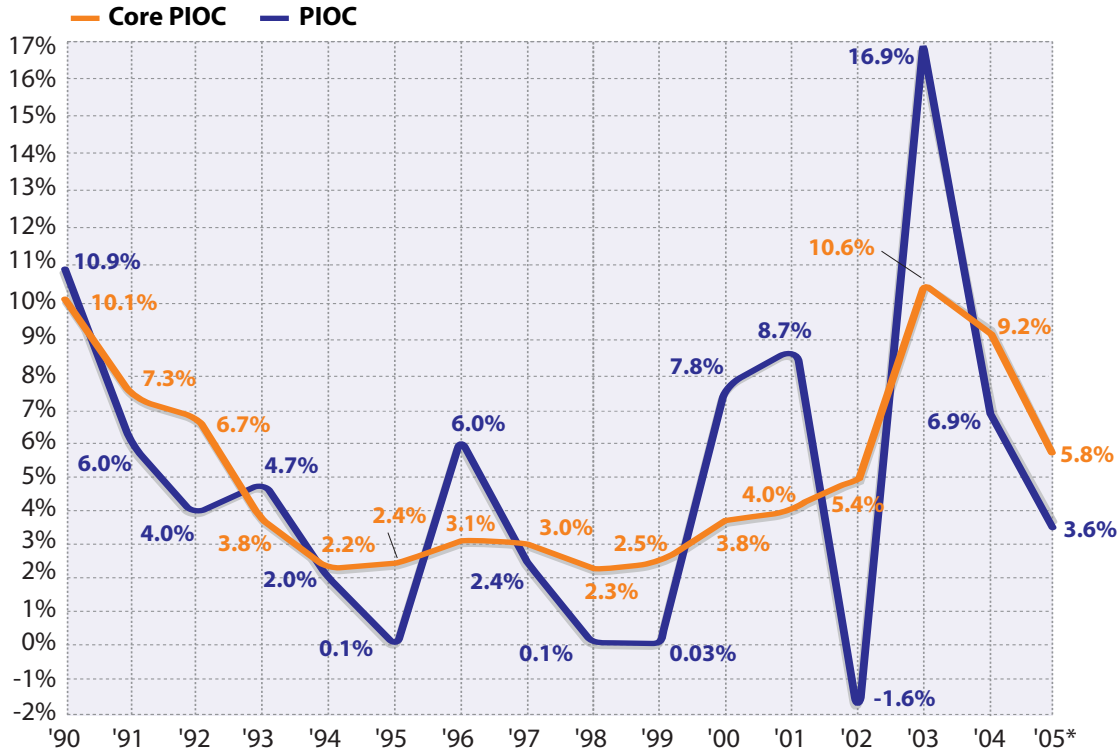
Taxes	3.0%
Labor Costs	3.5%
Fuel	-8.1%
Utilities	1.2%
Contractor Services	4.2%
Administrative Costs	4.7%
Insurance Costs	23.4%
Parts and Supplies	1.1%
Replacement Costs	0.9%

**All Projected Costs 3.6%**



**Percent Change in the Price Index of Operating Costs and the Core PIOC, 1990-2005**

*The Increase in the “Core” PIOC was Higher than the Apartment PIOC in 2004*



\*Note: The percent change for 2005 was estimated.  
Source: Price Indices of Operating Costs, 1990-2004, PIOC projection for 2005

NOI' commensurate formulas (see “Commensurate Rent Adjustment” section on page 9), which calculate one- and two-year guidelines that will compensate owners for the most recent change in costs measured by the Price Index. The PIOC Projection should not be considered in combination with these newer formulas in establishing guidelines.

Projecting changes in the PIOC has become more challenging in recent years. Energy prices—which affect about one-fifth of the market basket of operating costs measured in the index—have become increasingly volatile. Unpredictable geo-political events and changing weather patterns are some of the forces behind large changes in fuel-related costs (heating fuel, electricity, gas and steam) that have in turn hindered the accuracy of the PIOC projections in recent studies.

This year, operating costs in rent stabilized apartment buildings increased by 6.9% versus last year's

projected PIOC increase of 6.4%. The projected increases in all components of the PIOC except for Fuel and Insurance Costs, were within one percentage point of the actual measured changes, resulting in only a 0.5 percentage point difference between actual changes in this year's apartment index versus the projection from the 2003 PIOC.

The two components that showed the most variance between actual changes in costs versus projected changes, Fuel and Insurance Costs, are historically among the most volatile components of the PIOC making it difficult to predict future changes in costs. Fuel, which had a historically high increase the year before (66.9%), decreased by 2.8% in 2004 versus the expected decrease of 18.5%, a difference of almost 16 percentage points. The major reason fuel prices are hard to predict is that PIOC projection methodology assumes a return to “normal” weather, but actual weather

---

patterns are generally warmer or colder than “normal” (see Endnote 2). Since the PIOC year (May-April) 2004 was colder than normal, the actual decrease was less than the prediction. Insurance Costs, another increasingly unpredictable component, rose 5.0 percentage points lower than the 19.7% estimate to an increase of 14.7%.

Overall, the PIOC is expected to grow by 3.6% from 2004 to 2005 due to a 3.0% projected increase in Taxes, a 23.4% estimated increase in Insurance Costs, and projected growth in Contractor Services (4.2%) and Administrative Costs (4.7%). Labor Costs are projected to increase by 3.5%. These increases in cost are expected to be offset by decreases in Fuel (-8.1%) and energy-related utility costs. The overall Utilities component is expected to increase by 1.2% in 2005 because water and sewer rates are expected to rise by 5.5% and will offset the anticipated decreases in electricity and gas charges. The table on page 7 shows the predicted changes in the PIOC components for 2005. The core PIOC is projected to rise more rapidly than the overall PIOC, by 5.8%, as the energy-related costs that are predicted to decline are eliminated.

## Commensurate Rent Adjustment

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

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

The first commensurate method is called the “Net Revenue” approach. While this formula takes into consideration the types of leases actually signed by tenants, it does not adjust landlords’ NOI for inflation. The “Net Revenue” formula is presented in two ways, first adjusting for the mix of lease terms and second, adding an assumption for stabilized apartment turnover and the impact of revenue from vacancy increases. Under the “Net Revenue” formula, a guideline that would preserve NOI in the face of this year’s 6.9% increase in the PIOC, is 5.5% for a one-year lease and 9.0% for a two-year lease. Guidelines using this formula and adding assumptions for the impact of vacancy increases on revenues when apartments experience turnover are 2.5% for one-year leases and 4.5% for two-year leases.

The second commensurate method considers the mix of lease terms while adjusting NOI upward to reflect general inflation, keeping both O&M and NOI constant. This is commonly called the “CPI-Adjusted NOI” formula. A guideline that would preserve NOI in the face of the 2.96% increase in the Consumer Price Index (see Endnote 1) and the 6.9% increase in the PIOC is 7.0% for a one-year lease and 11.5% for a two-year lease. Guidelines using this formula and adding the estimated impact of vacancy increases are 4.0% for one-year leases and 7.0% for two-year leases.<sup>3</sup>

The original formula that has been in use since the inception of the Rent Guidelines Board, is called the “traditional” commensurate adjustment. The “traditional” commensurate yields 4.3% for a one-year lease and 5.5% for a two-year lease, given the increase in operating costs of 6.9% found in the 2004 PIOC, and the projection of a 3.6% increase next year.<sup>4</sup>

As a means of compensating for cost changes, this “traditional” commensurate rent adjustment has two major flaws. First, although the formula is supposed to keep landlords’ current dollar income constant, the formula does not consider the mix of one- and two-year lease renewals. Since only about three-fifths of leases are renewed in any given year, with a preponderance of leases having a two-year duration, the formula does not necessarily accurately estimate the amount of income needed to compensate landlords for operating and maintenance (O&M) cost changes.

A second flaw of the “traditional” commensurate formula is that it does not consider the erosion of

**commensurates**

landlords' income by inflation. By maintaining current dollar NOI at a constant level, adherence to the formula may cause profitability to decline over time. However, such degradation is not an inevitable consequence of using the "traditional" commensurate formula.<sup>5</sup>

All of these methods have their limitations. The "traditional" commensurate formula is artificial and does not consider the impact of lease terms or inflation on landlords' income. The "Net Revenue" formula does not attempt to adjust NOI based on changes in interest rates or deflation of landlord profits. The "CPI-Adjusted NOI" formula inflates the debt service portion of NOI, even though interest rates have been generally falling, rather than rising over recent years. Including a consideration of the amount of income owners receive on vacancy assumes both that vacancy increases are charged and collected, and that turnover rates are constant across the City.

Finally, it is important to note that only the "traditional" commensurate formula uses the PIOC projection and that this projection is not used in conjunction with or as part of the "Net Revenue" and "CPI-Adjusted NOI" formulas. As stated previously, all three formulas attempt to compensate owners for the adjustment in their operating and maintenance costs measured each year in the PIOC. The "Net Revenue" and the "CPI-Adjusted NOI" formulas attempt to compensate owners for the adjustment in O&M costs by using only the known PIOC change in costs (6.9%). The traditional method differs from the other formulas in that it uses both the PIOC's actual change in costs as well as the projected change in costs (3.6%). If the change in projected costs, which may not end up being an accurate estimate of owner's costs, is added to the "Net Revenue" and "CPI-Adjusted NOI" formulas, the resulting guidelines will likely over- or under-compensate for the change in costs.

Each of these formulae may be best thought of as a starting point for deliberations. The other Rent Guidelines Board annual research reports (e.g. the Mortgage Survey report and the Income and Expense Study) and testimony to the Board can be used to modify the various estimates depending on these other considerations.

## Methodology

### Owner Survey

The Owner Survey gathers information on management fees, insurance, and non-union labor from building managers and owners. Survey questionnaires, accompanied by a letter describing the purpose of the PIOC, were mailed to the owners or managing agents of stabilized buildings.

If the returned questionnaire was not complete, an interviewer contacted the owner/manager and the missing information was gathered. All of the price information given by the owner/managing agent was then confirmed by calling the relevant insurance and management companies and non-union employees.

The sample frame for the Owner Survey included more than 41,000 stabilized buildings registered with the New York State Division of Housing and Community Renewal (DHCR). A random sampling scheme was used to choose 5,100 addresses

*"Net Revenue"  
Commensurate Adjustment*

<u>1-Year Lease</u>	<u>2-Year Lease</u>
5.5%	9.0%

*"Net Revenue"  
Commensurate Adjustment  
with Vacancy Increase*

<u>1-Year Lease</u>	<u>2-Year Lease</u>
2.5%	4.5%

*"CPI-Adjusted NOI"  
Commensurate Adjustment*

<u>1-Year Lease</u>	<u>2-Year Lease</u>
7.0%	11.5%

*"CPI-Adjusted NOI"  
Commensurate Adjustment  
with Vacancy Increase*

<u>1-Year Lease</u>	<u>2-Year Lease</u>
4.0%	7.0%

*"Traditional"  
Commensurate Adjustment*

<u>1-Year Lease</u>	<u>2-Year Lease</u>
4.3%	5.5%

---

from this pool for the owner mailing. The number of buildings chosen in each borough was proportional to the share of stabilized buildings in that borough. The “multiple contact” method was used for the sixth consecutive year for the Owner Survey. Three successive mailings were sent at timed intervals to the owner or managing agent of each property selected in the survey sample.

Over 17% of the questionnaires mailed out were returned to the RGB, down from last year’s historically high return rate of nearly 20%. A total of 830 returned surveys contained usable information, from which quotes of owners’ annual insurance costs (731), non-union labor quotes (198) and management fees (108) were validated. The number of verified prices in 2003 and 2004 for the Owner Survey is shown in Appendix 1.

### **Fuel Oil Vendor Survey**

Fuel price information is gathered on a monthly basis via a telephone survey. A monthly survey makes it possible to keep in touch with fuel vendors and to gather the data on a consistent basis (i.e. on the same day of the month for each vendor). Vendors are called each month to minimize the likelihood of misreporting and also to reduce the reporting burden for the companies that do not care to look up a year’s worth of prices. The number of fuel quotes gathered this year was similar to last year and is contained in Appendix 1.

To calculate changes in fuel oil costs, monthly price data is weighted using a degree-day formula to account for changes in the weather. The number of Heating Degree Days (see Endnote 2) is a measure of heating requirements.

### **Real Estate Tax Computations**

The sample of buildings used to compute the 2004 tax price relative was drawn by providing a list of rent stabilized properties registered with DHCR to the Department of Finance. Finance “matched” this list against its records to provide data on assessed value, tax exemptions, and tax abatements for more than 36,000 buildings in FY 2003 and FY 2004.

The Department of Finance data was used to compute a tax bill for each stabilized building in FY 2003 and FY 2004. The change computed for the

PIOC is simply the percentage increase in aggregate tax bills for these buildings from FY 2003 to FY 2004.

### **Vendor Survey**

The Vendor Survey is used to gather price quotes for Contractor Services (e.g. painting), Administrative Costs (e.g. accountant and attorney fees), Parts and Supplies (e.g. mops), and Replacement Costs (e.g. refrigerators). As in prior years, the vendor database was updated by adding new vendors and by deleting those who no longer carry the products or perform the services outlined in the Vendor Survey item specifications. All vendor quotes were obtained over the telephone. The telephone interview procedures used for gathering price quotes were unchanged from prior years. A total of 766 recorded price quotes were gathered, over 13% more than in the previous PIOC. For a description of the items priced and the number of price quotations obtained for each item, refer to Appendix 1.

### **Other Items**

In addition to the items previously discussed, a number of other pieces of information are needed to complete the PIOC, including labor union contract and benefit information, Social Security rates, unemployment insurance rates, Heating Degree Days, telephone and utility rate schedules. These items are used in computing some of the labor components, changes in utility costs for electricity, gas, steam, and telephone, and the cost-weighted change in fuel prices. Finally, to measure the change in water and sewer costs for rent stabilized buildings, staff used the Water Board FY 2004 increase of 5.5%.<sup>6</sup>

### **Price Index Projections**

The PIOC Projections are estimated by using data from Federal, state and local agencies; estimates from related industry experts and trend forecasting using three-year or long-term averages.

Taxes were projected by using data from the Department of Finance’s tentative assessment roll for FY 2005 and the amended and restated City Council tax fixing resolution to estimate (for Class Two properties) the change in class levy share and assessments, the tax

rate and the impact of exemptions and abatements in the coming fiscal year. These estimates produce a projected tax cost for the owners of rental properties. Labor costs are projected by analyzing labor contract terms supplied by apartment workers union Local 32-BJ and a ten-year geometric average of all other Labor items.<sup>7</sup> Fuel costs are projected by using data and information from the U.S. Energy Information Administration's (EIA) current "Short-Term Energy Outlook" report, which includes assumptions about changes in usage according to a projected return to the average temperature over the last five years. Utility costs are projected by obtaining rate projections for the coming year from the New York City Water Board and EIA projections. Natural gas rate projections are combined with assumptions about usage if the coming year's weather had the five-year average number of Heating Degree Days.<sup>8</sup>

The other components, — Administrative Costs, Contractor Services, Insurance Costs, Parts and Supplies, and Replacement Costs — are projected by using three-year or ten-year geometric averages of the component price relatives.

## Acknowledgments

The Rent Guidelines Board would like to acknowledge the following individuals for their assistance in preparing the Price Index of Operating Costs this year: Dr. James F. Hudson and former RGB Executive Director Anita Visser for technical assistance and methodology and report review; Shirley Alexander for supervising the data collectors for the owner and vendor surveys and Ann Sheriff and Charmaine Frank for collecting owner and vendor information. □

## Endnotes

1. The average CPI-U for All Urban Consumers, New York-Northeastern New Jersey for the year from April 2002 to March 2003 (193.4) compared to the average for the year from April 2003 to March 2004 (199.2) rose by 2.96%. This is the latest available CPI data and is roughly analogous to the 'PIOC year', which for the majority of components compares the most recent point-to-point figures from April to April, monthly cost-weighted figures from May to April, or the two most recent fiscal year bills.
2. The May 2003 to April 2004 year was 6.7% colder than the most recent 5-year average "normal" year, and 4.5% warmer than the year

before. "Normal" weather refers to the typical number of Heating Degree Days measured at Central Park, New York City, over a given period. A Heating Degree Day is defined as, for one day, the number of degrees that the average temperature for that day is below 65 degrees Fahrenheit. The most recent five-year average "normal" temperature refers to the total number of average annual Heating Degree Days from "PIOC" years, May 1999 to April 2004, measured in Central Park by the National Weather Service.

3. The following assumptions were used in the computation of the commensurates: (1) the required change in landlord revenue is 62.5% of the 2004 PIOC increase of 6.9%, or 4.3%. The 62.5% figure is the most recent ratio of average operating costs to average income in stabilized buildings; (2) for the "CPI-Adjusted NOI" commensurate, the increase in revenue due to the impact of inflation on NOI is 37.5% times the latest 12-month increase in the CPI ending March 2004 (2.96%) or 1.1%; (3) these lease terms are only illustrative. Other combinations of one- and two-year guidelines could produce the adjustment in revenue; (4) assumptions regarding lease renewals and turnover were derived from the 1999 Housing and Vacancy Survey; (5) for the commensurate formulae including a vacancy assumption, the 18.0% median increase in vacancy leases found in the rent stabilized apartments that reported a vacancy lease in the 2001 Apartment registration file from the Division of Housing and Community Renewal was used.
4. The collectability of legally authorized adjustments is assumed. Calculating the "traditional" commensurate rent adjustment requires an assumption about next year's PIOC. In this case, the 3.6% PIOC projection for 2005 is used.
5. Whether profits will actually decline depends on the level of inflation, the composition of NOI (i.e. how much is debt service and how much is profit), changes in tax laws, and interest rates.
6. "Public Information Regarding Water and Wastewater Rates," New York City Water Board, April 2004, p. 12.
7. At the time of this report, the contract for Local 32-BJ of the Bronx expired at the end of April 2004. A new contract had not been negotiated; therefore there is no pay increase in place for April 2005. In lieu of a definitive pay increase, a three-year average of pay increases was used for this item of the Labor projection.
8. Source: "Short-Term Energy Outlook," April 2004. U.S. Energy Information Administration, Department of Energy.



# Appendix: Price Index of Operating Costs

## 1. PIOC Sample, Number of Price Quotes per Item, 2003 vs. 2004

Spec	Description	2003	2004	Spec	Description	2003	2004
211	Apartment Value	238	198	701	INSURANCE COSTS	<b>807</b>	<b>731</b>
212	Non-Union Super	151	119				
216	Non-Union Janitor/Porter	107	79	801	Light bulbs	7	11
	LABOR COSTS	<b>496</b>	<b>396</b>	802	Light Switch	5	11
301	Fuel Oil #2	29	28	803	Wet Mop	6	13
302	Fuel Oil #4	7	6	804	Floor Wax	7	12
303	Fuel Oil #6	6	6	805	Paint	11	16
	FUEL	<b>42</b>	<b>40</b>	806	Pushbroom	7	12
501	Repainting	125	127	807	Detergent	7	8
502	Plumbing, Faucet	32	34	808	Bucket	12	17
503	Plumbing, Stoppage	33	34	809	Washers	11	15
504	Elevator #1	12	14	810	Linens	10	10
505	Elevator #2	14	14	811	Pine Disinfectant	6	12
506	Elevator #3	13	14	812	Window/Glass Cleaner	7	12
507	Burner Repair	12	14	813	Switch Plate	7	11
508	Boiler Repair, Tube	11	10	814	Duplex Receptacle	8	14
509	Boiler Repair, Weld	7	5	815	Toilet Seat	14	21
510	Refrigerator Repair	15	11	816	Deck Faucet	13	18
511	Range Repair	11	10		PARTS & SUPPLIES	<b>138</b>	<b>213</b>
512	Roof Repair	22	22	901	Refrigerator #1	11	11
513	Air Conditioner Repair	10	10	902	Refrigerator #2	12	12
514	Floor Maint. #1	6	9	903	Air Conditioner #1	6	6
515	Floor Maint. #2	6	9	904	Air Conditioner #2	5	5
516	Floor Maint. #3	5	9	905	Floor Runner	10	10
518	Linen/Laundry Service	5	5	906	Dishwasher	9	8
	CONTRACTOR SERVICES	<b>339</b>	<b>351</b>	907	Range #1	10	11
601	Management Fees	129	108	908	Range #2	10	11
602	Accountant Fees	28	27	909	Carpet	10	11
603	Attorney Fees	21	24	910	Dresser	7	5
604	Newspaper Ads	20	19	911	Mattress & Box Spring	10	9
605	Agency Fees	5	5		REPLACEMENT COSTS	<b>100</b>	<b>99</b>
606	Lease Forms	6	9				
607	Bill Envelopes	13	10				
608	Ledger Paper	5	9				
	ADMINISTRATIVE COSTS	<b>227</b>	<b>211</b>		All Items	<b>2,149</b>	<b>2,041</b>

## 2. Expenditure Weights, Price Relatives, Percent Changes and Standard Errors, All Apartments, 2004

Spec #	Item Description	Expenditure Weights	Price Relative	% Change	Standard Error	Spec #	Item Description	Expenditure Weights	Price Relative	% Change	Standard Error
101	TAXES, FEES, & PERMITS	<b>0.2607</b>	<b>1.1616</b>	<b>16.16%</b>	<b>0.1143</b>	601	Management Fees	0.6991	1.0404	4.04%	1.3413
201	Payroll, Bronx, All	0.1167	1.0312	3.12%	0.0000	602	Accountant Fees	0.1401	1.0371	3.71%	1.1019
202	Payroll, Other, Union, Supts.	0.1153	1.0270	2.70%	0.0000	603	Attorney Fees	0.1233	1.0366	3.66%	1.2328
203	Payroll, Other, Union, Other	0.2856	1.0273	2.73%	0.0000	604	Newspaper Ads	0.0042	1.0572	5.72%	2.1386
204	Payroll, Other, Non-Union, All	0.2966	1.0580	5.80%	0.5919	605	Agency Fees	0.0054	1.1364	13.64%	5.6889
205	Social Security Insurance	0.0470	1.0390	3.90%	0.0000	606	Lease Forms	0.0100	1.0154	1.54%	1.3147
206	Unemployment Insurance	0.0076	1.1416	14.16%	0.0000	607	Bill Envelopes	0.0096	1.0214	2.14%	1.3066
207	Private Health & Welfare	0.1311	1.0816	8.16%	0.0000	608	Ledger Paper	0.0084	1.0361	3.61%	2.0327
	LABOR COSTS	<b>0.1500</b>	<b>1.0454</b>	<b>4.54%</b>	<b>0.1756</b>		ADMINISTRATIVE COSTS	<b>0.0783</b>	<b>1.0396</b>	<b>3.96%</b>	<b>0.9632</b>
301	Fuel Oil #2	0.5718	1.0024	0.24%	0.6003	701	INSURANCE COSTS	<b>0.0852</b>	<b>1.1470</b>	<b>14.70%</b>	<b>1.8315</b>
302	Fuel Oil #4	0.1543	0.9382	-6.18%	2.5036	801	Light Bulbs	0.0379	1.0082	0.82%	0.8473
303	Fuel Oil #6	0.2739	0.9273	-7.27%	1.3439	802	Light Switch	0.0480	1.0000	0.00%	0.0000
	FUEL	<b>0.1079</b>	<b>0.9719</b>	<b>-2.81%</b>	<b>0.6344</b>	803	Wet Mop	0.0426	1.0181	1.81%	1.5150
401	Electricity #1, 2,500 KWH	0.0117	0.8364	-16.36%	0.0000	804	Floor Wax	0.0392	1.0327	3.27%	2.3484
402	Electricity #2, 15,000 KWH	0.1569	0.8148	-18.52%	0.0000	805	Paint	0.2270	1.0032	0.32%	0.2343
403	Electricity #3, 82,000 KWH	0.0000	0.8307	-16.93%	0.0000	806	Pushbroom	0.0362	1.0268	2.68%	1.8914
404	Gas #1, 12,000 therms	0.0048	0.9434	-5.66%	0.0000	807	Detergent	0.0331	1.0294	2.94%	1.7521
405	Gas #2, 65,000 therms	0.0554	1.0541	5.41%	0.0000	808	Bucket	0.0396	1.0260	2.60%	1.3809
406	Gas #3, 214,000 therms	0.2462	1.0549	5.49%	0.0000	809	Washers	0.0968	1.0092	0.92%	0.9460
407	Steam #1, 1.2m lbs	0.0189	0.8157	-18.43%	0.0000	811	Pine Disinfectant	0.0478	1.0089	0.89%	0.6853
408	Steam #2, 2.6m lbs	0.0075	0.7979	-20.21%	0.0000	812	Window/Glass Cleaner	0.0517	1.0159	1.59%	1.0454
409	Telephone	0.0085	1.0539	5.39%	0.0000	813	Switch Plate	0.0461	1.0188	1.88%	1.3617
410	Water & Sewer	0.4902	1.0550	5.50%	0.0000	814	Duplex Receptacle	0.0338	1.0000	0.00%	0.0000
	UTILITIES	<b>0.1552</b>	<b>1.0077</b>	<b>0.77%</b>	<b>0.0000</b>	815	Toilet Seat	0.1005	1.0070	0.70%	0.4979
501	Repainting	0.3987	1.0279	2.79%	0.8431	816	Deck Faucet	0.1197	1.0172	1.72%	0.8132
502	Plumbing, Faucet	0.1415	1.0544	5.44%	0.9702		PARTS AND SUPPLIES	<b>0.0181</b>	<b>1.0118</b>	<b>1.18%</b>	<b>0.2363</b>
503	Plumbing, Stoppage	0.1286	1.0414	4.14%	0.8828	901	Refrigerator #1	0.0951	1.0154	1.54%	0.8821
504	Elevator #1, 6 fl., 1 e.	0.0559	1.0467	4.67%	1.2944	902	Refrigerator #2	0.4652	1.0045	0.45%	0.4442
505	Elevator #2, 13 fl., 2 e.	0.0372	1.0464	4.64%	1.3201	903	Air Conditioner #1	0.0180	1.0000	0.00%	0.0000
506	Elevator #3, 19 fl., 3 e.	0.0211	1.0474	4.74%	1.3937	904	Air Conditioner #2	0.0220	1.0041	0.41%	0.3785
507	Burner Repair	0.0393	1.0464	4.64%	1.8071	905	Floor Runner	0.0934	1.0350	3.50%	3.5060
508	Boiler Repair, Tube	0.0486	1.0467	4.67%	1.5857	906	Dishwasher	0.0473	1.0089	0.89%	0.8944
509	Boiler Repair, Weld	0.0340	1.0394	3.94%	2.5376	907	Range #1	0.0465	1.0078	0.78%	0.6773
510	Refrigerator Repair	0.0118	1.0185	1.85%	1.2093	908	Range #2	0.2125	1.0106	1.06%	0.7553
511	Range Repair	0.0124	1.0171	1.71%	1.2046		REPLACEMENT COSTS	<b>0.0077</b>	<b>1.00993</b>	<b>0.99%</b>	<b>0.4308</b>
512	Roof Repair	0.0570	1.0851	8.51%	2.3202		CONTRACTOR SERVICES	<b>0.1368</b>	<b>1.0406</b>	<b>4.06%</b>	<b>0.4356</b>
513	Air Conditioner Repair	0.0088	1.0209	2.09%	0.9497		ALL ITEMS	<b>1.0000</b>	<b>1.06857</b>	<b>6.86%</b>	<b>0.1997</b>
514	Floor Maint. #1, Studio	0.0003	1.0475	4.75%	2.7948						
515	Floor Maint. #2, 1 Br.	0.0005	1.0492	4.92%	2.9337						
516	Floor Maint. #3, 2 Br.	0.0045	1.0490	4.90%	2.9440						

### 3. Price Relative by Building Type, Apartments, 2004

Spec #	Item Description	Pre-1947	Post-1946	Gas Heated	Oil Heated	MASTER METERED BLDGS
101	TAXES, FEES, & PERMITS	1.1684	1.1517	1.1616	1.1616	1.1616
201-207	LABOR COSTS	1.0474	1.0431	1.0458	1.0456	1.0463
301-303	FUEL	0.9775	0.9504	1.0020	0.9709	1.0011
401-410	UTILITIES	1.0240	0.9829	1.0327	0.9961	0.9693
501-516	CONTRACTOR SERVICES	1.0414	1.0385	1.0379	1.0415	1.0410
601-608	ADMINISTRATIVE COSTS	1.0393	1.0399	1.0399	1.0395	1.0386
701	INSURANCE COSTS	1.1470	1.1470	1.1470	1.1470	1.1470
801-816	PARTS AND SUPPLIES	1.0117	1.0121	1.0110	1.0121	1.0130
904-908	REPLACEMENT COSTS	1.0100	1.0098	1.0090	1.0102	1.0143
<b>ALL ITEMS</b>		<b>1.0639</b>	<b>1.0691</b>	<b>1.0725</b>	<b>1.0640</b>	<b>1.0666</b>

### 4. Price Relative by Hotel Type, 2004

Spec #	Item Description	Hotel	Rooming House	SRO
101	TAXES, FEES, & PERMITS	1.1691	1.1745	1.2047
205-206, 208-216	LABOR COSTS	1.0499	1.0553	1.0569
301-303	FUEL	0.9806	1.0024	0.9485
401-407, 409-410	UTILITIES	0.9532	0.9237	0.9586
501-509, 511-516, 518	CONTRACTOR SERVICES	1.0251	1.0336	1.0378
601-608	ADMINISTRATIVE COSTS	1.0434	1.0427	1.0422
701	INSURANCE COSTS	1.1470	1.1470	1.1470
801-816	PARTS AND SUPPLIES	1.0133	1.0094	1.0108
901-904, 907-911	REPLACEMENT COSTS	1.0044	1.0047	1.0051
<b>ALL ITEMS</b>		<b>1.0722</b>	<b>1.0539</b>	<b>1.0440</b>

## 5. Percentage Change in Real Estate Tax Sample by Borough and Source of Change, Apartments and Hotels, 2004

	% Change Due to Assessments	% Change Due to Exemptions	% Change Due to Abatements	% Change Due to Tax Rates	% Change Due to Interactions	Total % Change
<b>APARTMENTS</b>						
Manhattan	8.79%	-1.48%	-0.01%	9.47%	0.68%	17.44%
Bronx	4.60%	-0.16%	0.14%	10.00%	0.41%	15.00%
Brooklyn	3.25%	-0.17%	0.00%	9.89%	0.29%	13.26%
Queens	4.30%	-0.18%	0.24%	9.68%	0.39%	14.42%
SI	3.16%	1.16%	0.09%	9.87%	0.40%	14.68%
<b>All apts</b>	<b>6.92%</b>	<b>-0.96%</b>	<b>0.04%</b>	<b>9.61%</b>	<b>0.55%</b>	<b>16.16%</b>
<b>HOTELS</b>						
Hotel	10.48%	-1.79%	0.00%	7.57%	0.65%	16.91%
RH	7.52%	0.05%	0.00%	9.19%	0.69%	17.45%
SRO	9.60%	-0.11%	1.22%	8.96%	0.81%	20.47%
<b>All hotels</b>	<b>9.62%</b>	<b>-0.74%</b>	<b>0.56%</b>	<b>8.46%</b>	<b>0.73%</b>	<b>18.63%</b>

Note: Totals may not add due to rounding.

## 6. Tax Change by Borough and Community Board, Apartments, 2004

Borough	Community Board	Number of Buildings	Tax Relative	Borough	Community Board	Number of Buildings	Tax Relative	Borough	Community Board	Number of Buildings	Tax Relative
Manhattan		<b>12,882</b>	<b>17.52%</b>	Bronx (cont.)	6	451	10.33%	(Bklyn. cont.)	17	587	13.47%
	1	48	13.22%		7	922	15.85%		18	69	10.38%
	2	1202	19.29%		8	346	12.42%	Queens		<b>6204</b>	<b>12.91%</b>
	3	1587	18.53%		9	281	18.55%		1	1770	14.67%
	4	1018	18.25%		10	190	13.69%		2	826	15.29%
	5	308	7.51%		11	298	16.11%		3	383	16.92%
	6	917	17.42%		12	384	17.43%		4	377	14.49%
	7	2050	18.65%	Brooklyn		<b>12,145</b>	<b>6.84%</b>		5	1139	15.91%
	8	2237	18.12%		1	1454	15.28%		6	336	14.68%
	9	720	19.77%		2	642	15.97%		7	382	14.68%
	10	796	18.07%		3	791	11.22%		8	194	12.84%
	11	584	16.86%		4	1229	17.16%		9	196	15.01%
	12	1403	19.69%		5	361	14.54%		10	56	11.86%
Lower		<b>8840</b>	<b>17.18%</b>		6	925	14.91%		11	117	13.10%
Upper		<b>4042</b>	<b>19.60%</b>		7	834	15.28%		12	155	12.79%
Bronx		<b>5016</b>	<b>13.83%</b>		8	932	14.30%		13	48	13.39%
	1	286	16.01%		9	529	14.01%		14	97	10.86%
	2	205	4.08%		10	770	13.37%	Staten Island		<b>175</b>	<b>11.10%</b>
	3	261	17.29%		11	699	13.34%		1	116	14.67%
	4	685	17.03%		12	591	11.91%		2	34	13.94%
	5	652	16.50%		13	173	13.55%		3	22	15.38%
					14	885	12.42%	<b>Total</b>		<b>36,422</b>	<b>16.16%</b>
					15	379	10.85%				
					16	284	8.93%				

Note: No Community Board could be assigned to the following number of buildings for each borough: Manhattan (12), Bronx (55), Brooklyn (11), Queens (128), Staten Island (3). The number of buildings in the category "All" for each borough includes these buildings which could not be assigned a Community Board. Core and Upper Manhattan building totals are defined by block count and cannot be calculated by using Community Board numbers alone.

## 7. Expenditure Weights, Price Relatives, Percent Changes and Standard Errors, All Hotels, 2004

Spec #	Item Description	Expenditure Weights	Price Relative	% Change	Standard Error	Spec #	Item Description	Expenditure Weights	Price Relative	% Change	Standard Error
101	TAXES, FEES, & PERMITS	<b>0.2656</b>	<b>1.1863</b>	<b>18.63%</b>	<b>0.7456</b>	601	Management Fees	0.6327	1.0404	4.04%	1.3413
205	Social Security Insurance	0.0554	1.0390	3.90%	0.0000	602	Accountant Fees	0.0815	1.0371	3.71%	1.1019
206	Unemployment Insurance	0.0160	1.1416	14.16%	0.0000	603	Attorney Fees	0.1290	1.0366	3.66%	1.2328
208	Hotel Private Health/Welfare	0.0399	1.0698	6.98%	0.0000	604	Newspaper Ads	0.0989	1.0572	5.72%	2.1386
209	Hotel Union Labor	0.3154	1.0400	4.00%	0.0000	605	Agency Fees	0.0239	1.1364	13.64%	5.688870409
210	SRO Union Labor	0.0123	1.0400	4.00%	0.0000	606	Lease Forms	0.0113	1.0154	1.54%	1.314661683
211	Apartment Value	0.1193	1.0519	5.19%	0.9194	607	Bill Envelopes	0.0130	1.0214	2.14%	1.3066
212	Non-Union Superintendent	0.3139	1.0570	5.70%	0.7815	608	Ledger Paper	0.0097	1.0361	3.61%	2.0327
213	Non-Union Maid	0.0000	0.0000	NA	0.0000		ADMINISTRATIVE COSTS	<b>0.0859</b>	<b>1.0430</b>	<b>4.30%</b>	<b>0.9042</b>
214	Non-Union Desk Clerk	0.0000	0.0000	NA	0.0000	701	INSURANCE COSTS	<b>0.0470</b>	<b>1.1470</b>	<b>14.70%</b>	<b>1.8315</b>
215	Non-Union Maint. Worker	0.0000	0.0000	NA	0.0000	801	Light Bulbs	0.0156	1.0082	0.82%	0.8473
216	Non-Union Janitor/Porter	0.1278	1.0596	5.96%	0.8960	802	Light Switch	0.0180	1.0000	0.00%	0.0000
	LABOR COSTS	<b>0.1709</b>	<b>1.0520</b>	<b>5.20%</b>	<b>0.2921</b>	803	Wet Mop	0.0500	1.0181	1.81%	1.5150
301	Fuel Oil #2	0.6614	1.0024	0.24%	0.6003	804	Floor Wax	0.0485	1.0327	3.27%	2.3484
302	Fuel Oil #4	0.0157	0.9382	-6.18%	2.5036	805	Paint	0.1241	1.0032	0.32%	0.2343
303	Fuel Oil #6	0.3229	0.9273	-7.27%	1.3439	806	Pushbroom	0.0409	1.0268	2.68%	1.8914
	FUEL	<b>0.1189</b>	<b>0.9771</b>	<b>-2.29%</b>	<b>0.5895</b>	807	Detergent	0.0441	1.0294	2.94%	1.7521
401	Electricity #1, 2,500 KWH	0.0771	0.8364	-16.36%	0.0000	808	Bucket	0.0481	1.0260	2.60%	1.3809
402	Electricity #2, 15,000 KWH	0.0877	0.8148	-18.52%	0.0000	809	Washers	0.0481	1.0092	0.92%	0.9460
403	Electricity #3, 82,000 KWH	0.2740	0.8307	-16.93%	0.0000	810	Linens	0.3199	1.0068	0.68%	0.7247
404	Gas #1, 12,000 therms	0.0489	0.9434	-5.66%	0.0000	811	Pine Disinfectant	0.0186	1.0089	0.89%	0.6853
405	Gas #2, 65,000 therms	0.0400	1.0541	5.41%	0.0000	812	Window/Glass Cleaner	0.0199	1.0159	1.59%	1.0454
406	Gas #3, 214,000 therms	0.1835	1.0549	5.49%	0.0000	813	Switch Plate	0.0543	1.0188	1.88%	1.3617
407	Steam #1, 1.2m lbs	0.0003	0.8157	-18.43%	0.0000	814	Duplex Receptacle	0.0405	1.0000	0.00%	0.0000
409	Telephone	0.1456	1.0539	5.39%	0.0000	815	Toilet Seat	0.0499	1.0070	0.70%	0.4979
410	Water & Sewer	0.1431	1.0550	5.50%	0.0000	816	Deck Faucet	0.0595	1.0172	1.72%	0.8132
	UTILITIES	<b>0.1574</b>	<b>0.9499</b>	<b>-5.01%</b>	<b>0.0000</b>		PARTS AND SUPPLIES	<b>0.0477</b>	<b>1.0122</b>	<b>1.22%</b>	<b>0.3177</b>
501	Repainting	0.2149	1.0279	0.0279	0.8431	901	Refrigerator #1	0.0197	1.0154	1.54%	0.8821
502	Plumbing, Faucet	0.0866	1.0544	5.44%	0.9702	902	Refrigerator #2	0.0953	1.0045	0.45%	0.4442
503	Plumbing, Stoppage	0.0833	1.0414	4.14%	0.8828	903	Air Conditioner #1	0.0617	1.0000	0.00%	0.0000
504	Elevator #1, 6 fl., 1 e.	0.0370	1.0467	4.67%	1.2944	904	Air Conditioner #2	0.0718	1.0041	0.41%	0.3785
505	Elevator #2, 13 fl., 2 e.	0.0339	1.0464	4.64%	1.3201	907	Range #1	0.0084	1.0078	0.78%	0.6773
506	Elevator #3, 19 fl., 3 e.	0.0315	1.0474	4.74%	1.3937	908	Range #2	0.0395	1.0106	1.06%	0.7553
507	Burner Repair	0.0278	1.0464	4.64%	1.8071	909	Carpet	0.3425	1.0000	0.00%	0.0000
508	Boiler Repair, Tube	0.0310	1.0467	4.67%	1.5857	910	Dresser	0.1949	1.0000	0.00%	0.0000
509	Boiler Repair, Weld	0.0256	1.0394	3.94%	1.2093	911	Mattress & Box Spring	0.1662	1.0185	1.85%	1.1485
511	Range Repair	0.1409	1.0171	1.71%	1.2046		REPLACEMENT COSTS	<b>0.0201</b>	<b>1.0046</b>	<b>0.46%</b>	<b>0.2005</b>
512	Roof Repair	0.0249	1.0851	8.51%	2.3202		ALL ITEMS	<b>1.0000</b>	<b>1.0616</b>	<b>6.16%</b>	<b>0.2471</b>
513	Air Conditioner Repair	0.0439	1.0209	2.09%	0.9497						
514	Floor Maint. #1, Studio	0.0009	1.0475	4.75%	2.7948						
515	Floor Maint. #2, 1 Br.	0.0018	1.0492	4.92%	2.9337						
516	Floor Maint. #3, 2 Br.	0.0166	1.0490	4.90%	2.9440						
518	Linen/Laundry Service	19.947%	100.000%	0.000%	0.000%						
	CONTRACTOR SERVICES	<b>0.0865</b>	<b>1.0291</b>	<b>2.91%</b>	<b>0.3114</b>						



## 8. Expenditure Weights and Price Relatives, Lofts, 2004

Spec #	Item Description	Weights	Price Relative	Spec #	Item Description	Weights	Price Relative
101	TAXES	<b>0.2481</b>	<b>16.16%</b>		ADMINISTRATIVE COSTS, LEGAL	<b>0.0926</b>	<b>3.66%</b>
201	Payroll, Bronx, All	0.0000	3.12%	601	Management Fees	0.8057	4.04%
202	Payroll, Other, Union, Supts.	0.2823	2.70%	602	Accountant Fees	0.1491	3.71%
203	Payroll, Other, Non-Union, Other	0.0000	2.73%	604	Newspaper Ads	0.0051	5.72%
204	Payroll, Other, Non-Union, All	0.5529	5.80%	605	Agency Fees	0.0065	13.64%
205	Social Security Insurance	0.0455	3.90%	606	Lease Forms	0.0108	1.54%
206	Unemployment Insurance	0.0083	14.16%	607	Bill Envelopes	0.0123	2.14%
207	Private Health & Welfare	0.1110	8.16%	608	Ledger Paper	0.0105	3.61%
	LABOR COSTS	<b>0.0993</b>	<b>4.26%</b>		ADMINISTRATIVE COSTS - OTHER	<b>0.0951</b>	<b>4.01%</b>
301	Fuel Oil #2	0.3108	0.24%	701	INSURANCE COSTS	<b>0.2053</b>	<b>14.70%</b>
302	Fuel Oil #4	0.5689	-6.18%				
303	Fuel Oil #6	0.1203	-7.27%	801	Light Bulbs	0.0379	0.82%
	FUEL	<b>0.0756</b>	<b>-4.32%</b>	802	Light Switch	0.0480	0.00%
401	Electricity #1, 2,500 KWH	0.0128	-16.36%	803	Wet Mop	0.0426	1.81%
402	Electricity #2, 15,000 KWH	0.1734	-18.52%	804	Floor Wax	0.0392	3.27%
403	Electricity #3, 82,000 KWH	0.0000	-16.93%	805	Paint	0.2270	0.32%
404	Gas #1, 12,000 therms	0.0053	-5.66%	806	Pushbroom	0.0362	2.68%
405	Gas #2, 65,000 therms	0.0607	5.41%	807	Detergent	0.0331	2.94%
406	Gas #3, 214,000 therms	0.1718	5.49%	808	Bucket	0.0396	2.60%
407	Steam #1, 1.2m lbs	0.0207	-18.43%	809	Washers	0.0968	0.92%
408	Steam #2, 2.6m lbs	0.0082	-20.21%	811	Pine Disinfectant	0.0478	0.89%
409	Telephone	0.0093	5.39%	812	Window/Glass Cleaner	0.0517	1.59%
410	Water & Sewer - Frontage	0.5379	5.50%	813	Switch Plate	0.0460	1.88%
	UTILITIES	<b>0.0775</b>	<b>0.28%</b>	814	Duplex Receptacle	0.0338	0.00%
501	Repainting	0.3985	2.79%	815	Toilet Seat	0.1004	0.70%
502	Plumbing, Faucet	0.1416	5.44%	816	Deck Faucet	0.1198	1.72%
503	Plumbing, Stoppage	0.1286	4.14%		PARTS AND SUPPLIES	<b>0.0187</b>	<b>1.18%</b>
504	Elevator #1, 6 fl., 1 e.	0.0558	4.67%	901	Refrigerator #1	0.0952	1.54%
505	Elevator #2, 13 fl., 2 e.	0.0372	4.64%	902	Refrigerator #2	0.4652	0.45%
506	Elevator #3, 19 fl., 3 e.	0.0211	4.74%	903	Air Conditioner #1	0.0180	0.00%
507	Burner Repair	0.0393	4.64%	904	Air Conditioner #2	0.0220	0.41%
508	Boiler Repair, Tube	0.0486	4.67%	905	Floor Runner	0.0934	3.50%
509	Boiler Repair, Weld	0.0341	3.94%	906	Dishwasher	0.0473	0.89%
510	Refrigerator Repair	0.0118	1.85%	907	Range #1	0.0464	0.78%
511	Range Repair	0.0124	1.71%	908	Range #2	0.2126	1.06%
512	Roof Repair	0.0569	8.51%		REPLACEMENT COSTS	<b>0.0149</b>	<b>0.99%</b>
513	Air Conditioner Repair	0.0088	2.09%				
514	Floor Maint. #1, Studio	0.0003	4.75%				
515	Floor Maint. #2, 1 Br.	0.0005	4.92%				
516	Floor Maint. #3, 2 Br.	0.0045	4.90%				
	CONTRACTOR SERVICES	<b>0.0730</b>	<b>4.06%</b>		ALL ITEMS	<b>1.0000</b>	<b>8.20%</b>