2012 Price Index of Operating Costs

April 19, 2012

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2012 Price Index Of Operating Costs

What's New

- ✔ The Price Index of Operating Costs (PIOC) for Rent Stabilized Apartment Buildings increased 2.8% this year.
- ✔ Costs in natural-gas heated buildings increased 0.6% and costs in fuel-oil heated buildings rose 3.9%.
- ✔ 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 5.0% this year.
- ✔ Fuel Oil costs rose 1.6%.
- ✔ Real estate taxes increased 7.5% due to a rise in assessments and tax rate for Class Two properties.
- ✔ Labor Costs rose 2.5%.
- ✔ The Utilities component decreased by 4.0%, primarily due to a decrease in natural gas costs.
- ✔ Insurance Costs increased by 2.5%.
- ✔ The Price Index of Operating Costs for Rent Stabilized Apartment Buildings is projected to increase 7.0% 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 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.

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

Changes in the overall PIOC result from changes in the prices of individual goods and services, each weighted by its relative importance as a percentage of total operating and maintenance (O&M) expenditures. Because the market basket is fixed in the sense that the quantities of goods and services of each kind remain constant, the relative importance of the various goods and services will change when their prices increase either more quickly or more slowly than average. Thus, the relative importance, or weight, attached to each good or service changes from year to year to reflect the different rates of price change among the various index items. The expenditure weights used in the construction of the 2012 Price Index are based upon the 1983 Expenditure Study and are revised on the basis of annually measured price changes from 1982-2011.

The importance of each index component is shown by its "expenditure weight" (see Appendix 2). The measured 2011-12 price changes in each index component are also presented in this appendix. The expenditure weights and

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.

Apartments

Change In Costs for Rent Stabilized Apartment Buildings, March 2011 to March 2012

Taxes	7.5%
Labor Costs	2.5%
Fuel Oil	1.6%
Utilities	-4.0%
Contractor Services	3.2%
Administrative Costs	2.6%
Insurance Costs	2.5%
Parts and Supplies	3.7%
Replacement Costs	3.2%
All Costs	**2.8%**

the 2011-12 price changes are then combined to provide the overall change in the PIOC over the period from 2011-12.

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

Overview

This year, the PIOC for all rent stabilized apartment buildings increased by 2.8%, 3.3 percentage points less than the PIOC percentage change from the year before (6.1% in 2011). The PIOC was driven upward by a significant increase in the real estate tax component of 7.5%. More moderate increases were seen in Contractor Services (3.2%), Administrative Costs (2.6%), Insurance Costs (2.5%), Labor Costs (2.5%) and Fuel Oil costs[1] (1.6%). The Parts and Supplies and Replacement Costs components, each of which carry very little weight in the PIOC, increased 3.7% and 3.2% respectively. In contrast, the Utilities component declined 4.0%. The growth in the Consumer Price Index (CPI) during this same time period was slightly higher than the PIOC, rising 3.0%.[2] See the adjacent table and Appendix 2 for changes in costs and prices for all rent stabilized apartment buildings from 2011-12.

The "core" PIOC, which excludes erratic changes in fuel oil, natural gas, and electricity costs, is useful for analyzing long-term inflationary trends. The core PIOC rose by 5.0% this year and was higher than the overall PIOC due to the exclusion of fuel oil costs, which witnessed moderate growth, and natural gas costs that declined significantly.

Price Index Components

Taxes

The Taxes component of the PIOC is based entirely on real estate taxes and accounts for nearly thirty percent of the overall price index. The change in tax cost is estimated by comparing aggregate taxes levied on rent stabilized apartment buildings in Fiscal Year (FY) 2011 and FY 2012.

Real estate taxes rose this year by 7.5%. This is more than twice the growth seen in last year's price index (3.5%) but lower than the double-digit increases in real estate taxes witnessed in 2009 and 2010. The change in taxes was primarily due to a rise in assessments in FY 2012. Tax rates also rose, but at a much slower pace than assessments. The average values of both exemptions and abatements declined, but neither had much impact on this year's tax component.

Tax Levy — The total tax levy for all properties in the City (commercial and residential) increased by 5.2% from FY 2011 to FY 2012. The Class Two property levy rose at a faster pace than that of the City as a whole, at a rate of 6.3%. The distribution of the levy among property classes tends to shift from year to year. From FY 2011 to FY 2012, the levy share for Class Two properties increased, by 0.4 percentage points, from 37.4% to 37.8% of the total tax burden. This is the highest percentage of levy share since the inception of the four-class system in 1983, when the share was 26.3%.

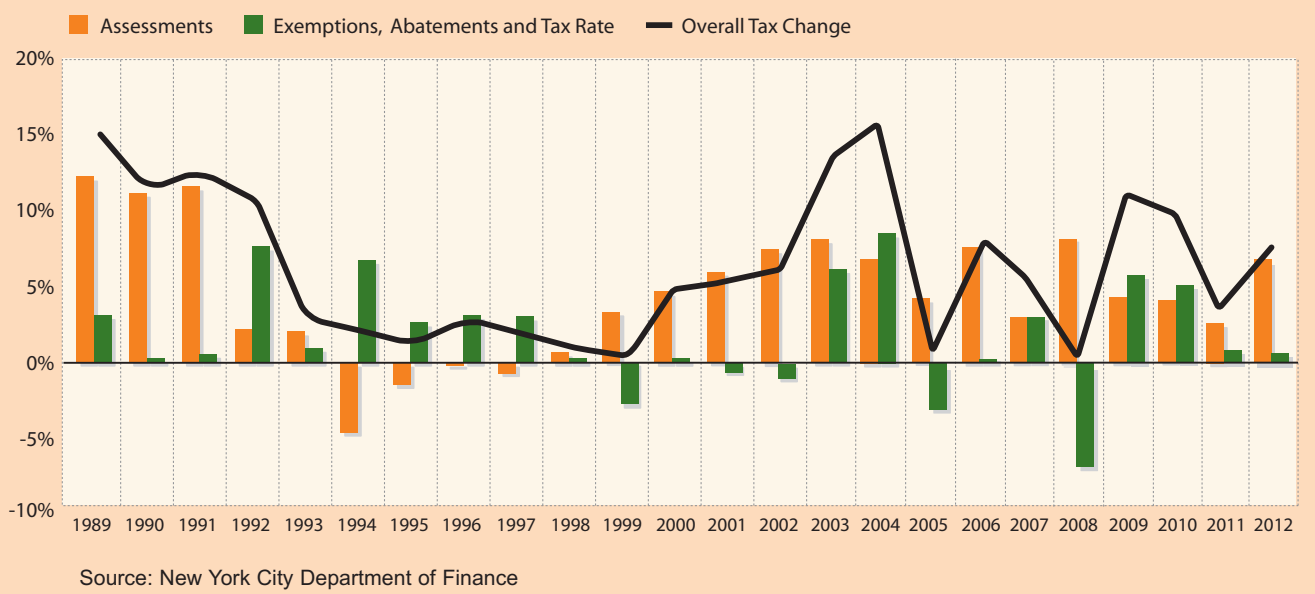
Tax Rate — The average annual FY 2011 Class Two tax rate of 13.353 increased by 0.6%, resulting in a new annualized rate of 13.433 for FY 2012. This is the fourth consecutive year in which the Class Two tax rate rose. For a historical perspective of changes in the tax rate, see the green bars on the graph below.

Assessments — Assessed valuations of rent stabilized properties rose by 7.1% citywide in FY 2012, the highest increase in assessments since FY 2008. This increase was driven by an 8.4% rise in assessments in Manhattan. More moderate increases were seen in Brooklyn (5.7%), Queens (5.4%), Staten Island (4.6%) and the Bronx (2.5%). This is a reversal from last year when assessments declined or were nearly flat in all boroughs except Manhattan. Buildings in Manhattan generally drive much of the change in assessed value citywide, with 65% of all valuations emanating from this borough in FY 2012. For a historical perspective of changes in tax assessments, see the orange bars on the graph on the this page.

Abatements and Exemptions — This year, the number of rent stabilized buildings with tax abatements increased by 11.7%. However, the average benefit value of the typical tax abatement decreased, by 13.9%, from FY 2011 to FY 2012. The net impact of the increase in the number of abatements and the decrease of the average abatement value was a negligible rise in the tax liability for rent stabilized buildings of 0.004%.

In FY 2012, 2.1% more rent stabilized buildings benefited from tax exemptions. However, the value of

Percent Change in Taxes due to Assessments and Exemptions/Abatements/Tax Rate 1989-2012



the average tax exemption decreased. This decrease in the average value of tax exemptions offset the increase in the number of buildings receiving exemptions, resulting in owners' tax bills decreasing by 0.4%. (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 12.9% of the overall Price Index.

Labor Costs rose 2.5%, similar to the increase seen in last year's PIOC of 2.7%. The rise in Labor Costs was due to increases in union and non-union wages, as well as rises in healthcare and pension contributions.

Wages comprise three-quarters of the Labor Costs component. Non-union pay increased by 2.2%, nearly one percentage point lower than the increase seen in the 2011 PIOC (3.1%). In contrast, the unionized wage increase was 0.3 percentage points higher than the previous year, rising 1.8% in 2012, compared to 1.5% in 2011.

Fuel Oil

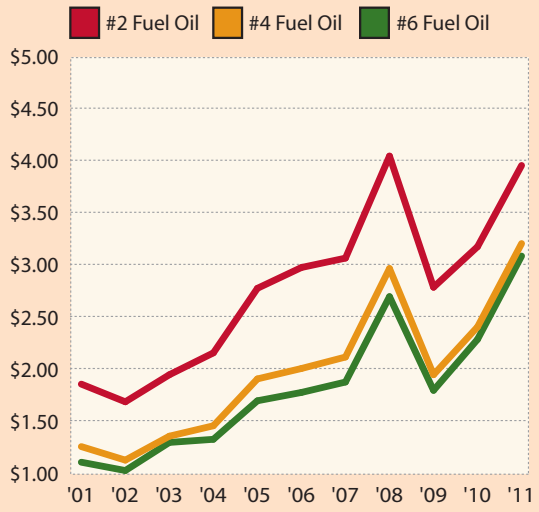
The Fuel Oil component comprises 13.3% of this year's Price Index (see Endnote 1). The change in cost measured in this component considers both the change in weather and the change in prices for the three types of heating oil used to heat multi-family buildings in New York City. This year the Fuel Oil component rose 1.6%, a significantly slower rise than witnessed in last year's index of 23.1%. (See "Fuel Oil" in the Methodology section of this report for changes in calculating the overall weight of the Fuel Oil component.)

The PIOC measured fuel oil prices from April to March and then compared them to the same months from the previous year. Over the past 12 months, fuel oil prices increased by 20.8%. The price for #2 oil, which comprises about half of this component, increased 19.0%. Prices for #4 and #6 heating oil rose more than #2 oil, rising 22.4% and 23.3%, respectively.

Over the past ten years the average prices per gallon for all fuel grades, which are pure prices that do not factor in weather, have risen substantially. The average price for all grades of fuel oil in calendar year 2011 was $3.71 a gallon. Adjusted for inflation, the average price in 2001 was $1.64. This is an annual rate of increase in the price of fuel oil of almost nine percentage points above the general rate of inflation. Adjusted for inflation, the price of #2 Fuel Oil (the most commonly used fuel oil) rose by 24.7% in 2011, following an increase of 14.1% in 2010. (See graph on this page.)

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

Average Inflation-Adjusted Fuel Oil Prices per Gallon, 2001-2011



Note: Prices are in constant 2011 dollars.
Source: Price Indices of Operating Costs, 2001-2012

Fuel Oil Cost Relatives vs. Change in Fuel Prices, 2003-2012

PIOC Year	*Fuel Oil Cost Relative**	*Change in Fuel Oil Price***
2012	1.6%	20.8%
2011	23.1%	20.3%
2010	0.5%	6.7%
2009	-10.1%	-16.9%
2008	37.4%	38.4%
2007	0.5%	-3.0%
2006	22.8%	28.2%
2005	20.0%	26.5%
2004	-2.8%	0.6%
2003	66.9%	31.4%

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

** Weighted change in #2, #4 and #6 fuel oil prices.

Source: Price Indices of Operating Costs, 2003-2012

warmer than last year, weather decreased the demand for fuel oil. The combination of the rise in heating oil prices and an decrease in demand resulted in a rise in the cost for heating buildings with oil by 1.6%.[3]

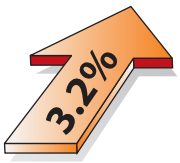
In years that are colder than the prior year, the weather factor will place upward pressure on the Fuel Oil cost relative, enhancing pure price increases of fuel oil and dampening the effect of price declines. However, in years that are warmer than the prior year, the Fuel Oil component will be lower than pure price increases and will show larger declines if fuel oil prices decrease. For instance, in the 2012 PIOC, weather was significantly warmer than the prior year and thus less fuel oil was used, so although fuel oil prices rose by 20.8%, the price relative reported in the PIOC is 1.6%. In contrast, the 2003 Price Index witnessed an increase in fuel oil prices of 31.4%, but the rise in the Fuel Oil component was 66.9% due to the weather being significantly colder than the previous PIOC year. See the table above for a comparison of the Fuel Oil component relatives and the change in fuel oil prices over the past ten years.

Utilities

The Utilities component consists primarily of electricity, natural gas, and water and sewer charges. In fact, water and sewer costs account for over 50% of the Utilities component. Telephone and steam costs are a small part of this component. In the case of most Utilities items, changes in costs are measured using the PIOC specifications (e.g. the quantity of electricity, steam, etc. being purchased) and the changes in rate schedules. It is important to note that changes in natural gas costs for heat and hot water are included in this component. (See Spec 405 and 406 in Appendix 2.) See "Utility Costs Computation" in the Methodology section of this report for changes in the computation of the Utilities component.

This year Utilities decreased 4.0%, which is in contrast to last year's increase of 7.7%. Decreases in gas costs (23.5%), as well as costs for electricity (8.2%) and steam (6.5%), were somewhat offset by an increase in water and sewer costs (7.5%).

Contractor Services



The Contractor Services component rose 3.2%, 0.5 percentage points higher than last year's growth of 2.7%. This is the first time in the past four years that the growth in this component was more than three percent. Between the years 2003 and 2008 the growth in this component was more than four percent annually. Previously, Contractor Services costs rose above four percent only once from 1992 through 2002.

The most important items in this component by weight are repainting and plumbing rates, which comprise two-thirds of the Contractor Services component. Painters' rates rose 3.5%, up from last year's increase of 3.0%. Rates charged by plumbers increased by 2.8%, a lower increase than last year's growth of 3.2%. Painters and plumbers reported that increases in the cost of labor, insurance, and materials were the primary factors that led to an increase in their rates. However, as reported in last year's report, there

were still painters who lowered their rates due to the "poor economy" and the need to attract customers.

The highest increase of any item in the Contractor Services component was roof repair, which increased by 9.1%. This was due, in part, to the increase in the price of oil-based materials. All other items in this component witnessed changes in costs ranging from a 5.1% increase (refrigerator repair) to a decrease of 0.9% (boiler tube repair). (See Appendix 2)

Administrative Costs

Administrative Costs rose 2.6%, 0.3 percentage points lower than last year's increase (2.9%) and the smallest growth in this component since the inception of the Price Index in 1969. 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 (3.0%) that comprise nearly three-quarters 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 less than last year's (3.4%), indicating that management companies lowered their fees and/or rents increased at a slower rate than last year. In addition, the lower growth rate may also be the result of more vacancies and/or collection losses in the buildings they manage compared to the previous year.

Accounting fees increased in this year's PIOC by 0.8%, similar to last year's rise of 0.7%. Attorney fees rose 1.9%, slightly less than last year's growth of 2.2%.

All other items in this component witnessed changes in price relatives from 0%-1.7%.[4] (See Appendix 2)

Insurance Costs

Insurance Costs increased for the first time in the past four years, rising 2.5%. The three previous price indices showed declines in the cost of insurance between 0.4% and 2.9%. The increases seen in this component from 2006 to 2008 of 1.9%-2.5% were more moderate compared to the period between 2002-2005, when escalating insurance costs rose a cumulative 104%. 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%.

Changes in insurance costs for owners varied by the amount of the policy. Policies that cost more than $4,262.50, which represent half of all verified insurance quotes, saw an average increase in cost of 2.9% upon renewal. Meanwhile, buildings with policies under $4,262.5, saw an increase of 0.7%.

Parts and Supplies

The Parts and Supplies component accounts for less than two percent of the entire Price Index. The overall increase in the Parts and Supplies component was 3.7%, the same rise as witnessed in last year's PIOC.

Replacement Costs

The Replacement Costs component has the lowest weight of any component, with its weight being less than 1/100th of the PIOC. This year Replacement Costs rose 3.2%, a larger rise than the 0.6% increase reported in the 2011 Price Index.

PIOC by Building Type

The 1983 Expenditure Study provides a basis for calculating separate sets of expenditure weights for different types of buildings that contain rent stabilized units. In addition to the all apartment PIOC, this report includes separate indices for buildings constructed before 1947 (pre-1947) and for buildings constructed in 1947 or later (post-1946) as well as 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)

Typically, buildings constructed before 1947 incur a lower percentage of operating and maintenance costs for property taxes, which rose 7.5%, than post-1946 buildings. However their fuel oil costs, which increased by 1.6%, represent a significantly higher percentage of total operating and maintenance costs. As a result, the PIOC for Pre-1947 buildings was 2.2%, lower than that for Post-1946 buildings (2.9%).

Due to the decline in natural gas costs for heating multi-family buildings in NYC, the Price Index for gas-heated buildings was nearly flat, rising just 0.6%. In contrast, buildings heated with fuel oil saw a rise in costs of 3.9%. The PIOC for master-metered buildings was 1.3%.

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, maid or linen services; 2) Rooming Houses — a multiple dwelling other than a hotel with thirty or fewer sleeping rooms; and 3) single room occupancy hotels (SROs) — a multiple dwelling in which one or two persons reside separately and independently of other occupants in a single room.

The Price Index for all stabilized Hotels rose 3.7% this year, a significantly smaller increase than the 7.6% rise in 2011. The Price Index for Hotels was 0.9 percentage points higher than the increase in costs measured in the Apartment Price Index. Significant disparities between the Hotel Index and the Apartment Index were seen in the Tax and Utilities components. Taxes for Hotels increased at a higher pace (11.0%) than the increase for apartments (7.5%). In contrast, the decrease in Utilities for all types of Hotels was 9.1%, versus the 4.0% decline for apartment buildings.

In addition to the changes in costs in Taxes and Utilities mentioned above, increases were seen in the remaining Hotel cost components. Contactor Services increased 4.3% and Labor by 2.7% while Administrative Costs and Insurance rose at the same rate (2.5%). Fuel Oil costs, which make up roughly 16% of the PIOC for hotels, rose 1.4%. Parts and Supplies and Replacement Costs, which carry very little weight in the Hotel Index, rose 2.5% and 2.0%, respectively. See the table on this page for changes in costs and prices for all rent stabilized hotels from 2011-2012.

Among the different categories of Hotels, the index for "traditional" hotels increased 6.7%, which was higher than increases for both Rooming Houses (3.7%) and SROs (1.3%). The differences between these indices are due to the increased weight and more rapid increase in costs in the Tax component for "traditional" hotels. (See Appendices 4 and 7)

Hotels

Change In Costs for Rent Stabilized Hotel Buildings, March 2011 to March 2012

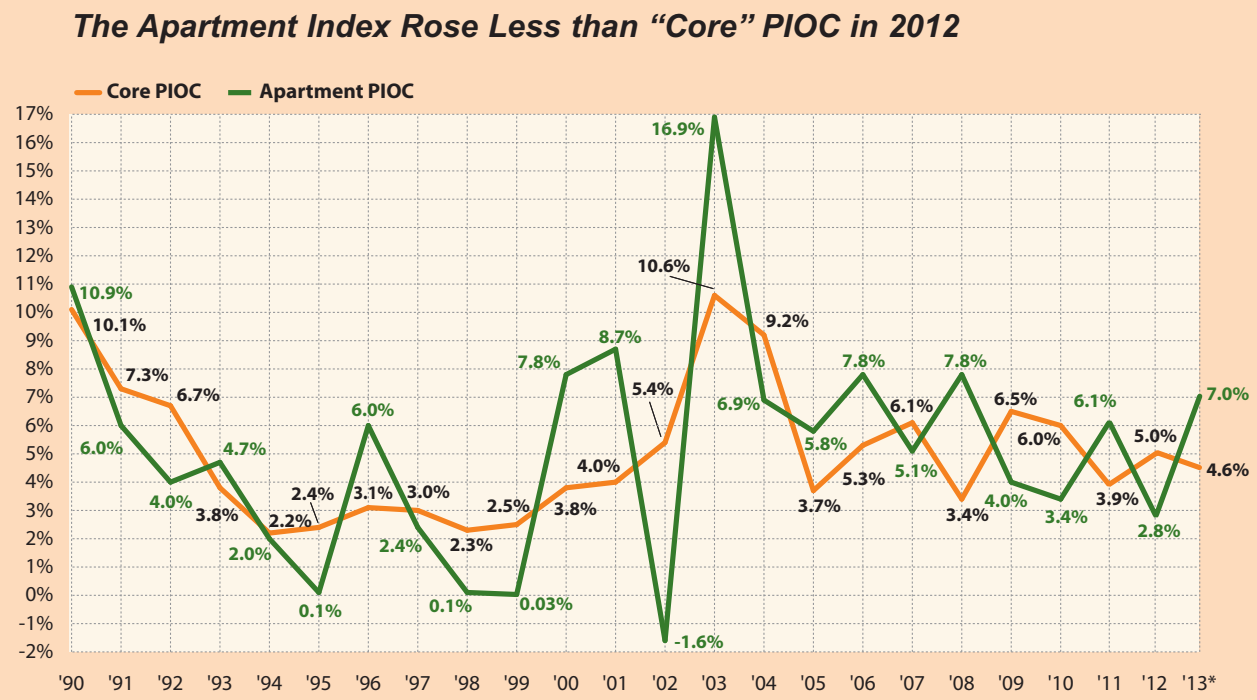
Taxes	11.0%
Labor Costs	2.7%
Fuel Oil	1.4%
Utilities	-9.1%
Contractor Services	4.3%
Administrative Costs	2.5%
Insurance Costs	2.5%
Parts and Supplies	2.5%
Replacement Costs	2.0%
All Costs	**3.7%**

Lofts

Change In Costs for Rent Stabilized Loft Buildings, March 2011 to March 2012

Taxes	7.5%
Labor Costs	2.5%
Fuel Oil	2.1%
Utilities	-0.2%
Contractor Services	3.2%
Admin Costs, Legal	1.9%
Admin Costs, Other	2.7%
Insurance Costs	2.5%
Parts and Supplies	3.7%
Replacement Costs	3.2%
All Costs	**3.7%**

Percent Change in the Price Index of Operating Costs and the Core PIOC, 1990-2013



*Note: The percent change for 2013 is estimated.
Source: Price Indices of Operating Costs, 1990-2012, PIOC and Core PIOC projections for 2013

Rent Stabilized Lofts

The increase in the Loft Index this year was 3.7%, 0.9 percentage points higher than the increase for apartments. This difference is explained by the fact that the Utilities component decreased by just 0.25% for Lofts versus the decrease in Apartments of 4.0%. This smaller decrease in Utilities placed less downward pressure on the Loft Index resulting in an increase in the overall Loft Index that was higher than the PIOC for Apartments. See the table on the previous page and Appendix 8 for changes in costs and prices for all rent stabilized lofts from 2011-12.

The Core PIOC

The Core PIOC, which measures long-term local trends by factoring out shifts in fuel costs, gas, and electricity rates, rose 5.0% in 2012. The rise in the 2012 Core was 2.2 percentage points higher than the Apartment Index. The Core PIOC rose at a faster pace than the overall PIOC because fuel oil costs rose at a slower rate (1.6%) than the Index as a whole (2.8%). Furthermore, the Core Index excludes the cost for heating apartments with natural gas, which witnessed a decline in costs of 23.7%. (See graph on the this page.)

PIOC Projections for 2013

Section 26-510 of the Rent Stabilization Law requires the Board to consider prevailing and projected operating and maintenance costs. Projections for 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 to assist the Board in setting guidelines for tenants choosing two- or three-year leases.

2013 Projections

Projected Change In Costs for Rent Stabilized Apartment Buildings, March 2012 to March 2013

Taxes	6.4%
Labor Costs	4.0%
Fuel Oil	21.4%
Utilities	7.0%
Contractor Services	2.7%
Administrative Costs	3.2%
Insurance Costs	0.0%
Parts and Supplies	2.0%
Replacement Costs	1.8%
All Projected Costs	**7.0%**

It is important to note that changes in costs and prices after March 2012, 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 NOI' commensurate formulas (see the "Commensurate Rent Adjustment" section on this page), 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 represent about one-fifth of the market basket of operating costs measured in the index — have become increasingly volatile. Unpredictable geo-political events, recession and changing weather patterns are some of the forces behind large changes in fuel-related costs (heating fuel oil, electricity, gas and steam) that have in turn hindered the accuracy of the PIOC projections in recent studies. The tax component, which accounts for roughly thirty percent of the entire Price Index, has also become harder to project due to changes in tax policy, such as tax rate reductions and changes to the City's tentative assessment roll, after the period covered in this Price Index.

This year, operating costs in rent stabilized apartment buildings increased by 2.8%, versus last year's projected PIOC increase of 7.4%. The components that showed the most variance between actual changes in costs versus projected changes were Fuel Oil, Utilities, Insurance Costs and Taxes. Fuel Oil, a historically volatile component, was projected to increase 19.6%, but actually rose 1.6%. Utilities were anticipated to rise 6.0%, but actually declined by 4.0%. And Insurance costs increased by 2.5% in 2012, versus the expected decrease of 1.8%. Meanwhile, Taxes were anticipated to rise 10.0%, but actually rose 7.5%. The remaining 2012 projected components of the PIOC were within 1.8 percentage points of the actual measured changes.

Overall, the PIOC is expected to grow by 7.0% from 2012 to 2013. Costs are predicted to rise in each component except Insurance, where costs are anticipated to remain flat. Fuel Oil, the most volatile PIOC component, is expected to increase the greatest proportion, by 21.4%. Taxes, the component that carries the most weight in the Index, is projected to increase 6.4% while the Utilities component is anticipated to increase 7.0%. More moderate increases are projected in Labor (4.0%), Administrative Costs (3.2%) and Contractor Services (2.7%). The Parts and Supplies and Replacement Costs components are expected to rise 2.0% and 1.8%, respectively. The table on this page shows predicted changes in PIOC components for 2013. The core PIOC is projected to rise 4.6%, less than the overall PIOC.

Commensurate Rent Adjustments

Throughout its history, the Rent Guidelines Board has used a formula, known as the commensurate rent adjustment, to help determine annual rent guidelines for rent stabilized apartments. In essence, the "commensurate" combines various data concerning operating costs, revenues, and inflation into a single measure 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

Commensurates

"Net Revenue" Commensurate Adjustment

1-Year Lease	2-Year Lease
2.25%	4.0%

"Net Revenue" Commensurate Adjustment with Vacancy Increase

1-Year Lease	2-Year Lease
1.25%	2.0%

"CPI-Adjusted NOI" Commensurate Adjustment

1-Year Lease	2-Year Lease
3.75%	6.0%

"CPI-Adjusted NOI" Commensurate Adjustment with Vacancy Increase

1-Year Lease	2-Year Lease
2.5%	4.0%

"Traditional" Commensurate Adjustment

1-Year Lease	2-Year Lease
1.9%	4.3%

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 2.8% increase in the PIOC is 2.25% for a one-year lease and 4.0% for a two-year lease. Using this formula and adding assumptions for the impact of vacancy increases on revenues when apartments experience turnover result in guidelines of 1.25% for one-year leases and 2.0% for two-year leases.

The second commensurate method considers the mix of lease terms while adjusting NOI upward to reflect general inflation, keeping both operating and maintenance (O&M) costs and NOI constant. This is commonly called the "CPI-Adjusted NOI" formula. A guideline that would preserve NOI in the face of the 3.0% increase in the Consumer Price Index (see Endnote 1) and the 2.8% increase in the PIOC is 3.75% for a one-year lease and 6.0% for a two-year lease. Guidelines using this formula and adding the estimated impact of vacancy increases are 2.5% for one-year leases and 4.0% for two-year leases.[5]

The "traditional" commensurate adjustment is the formula that has been in use since the inception of the Rent Guidelines Board. The "traditional" commensurate yields 1.9% for a one-year lease and 4.3% for a two-year lease. This reflects the increase in operating costs of 2.8% found in the 2012 PIOC and the projection of a 7.0% increase next year.[6]

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 O&M cost changes.

A second flaw of the "traditional" commensurate formula is that it does not consider the erosion of 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.[7]

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 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 (2.8%). 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 (7.0%). If the change in projected costs, which may not be 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 *Income and Affordability 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. And this year, for the first time, owners could complete the survey online. 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 over 39,000 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 from this pool for the owner mailing. The number of buildings chosen in each borough was nearly proportional to the share of stabilized buildings in that borough. Three successive mailings were sent at timed intervals to the owner or managing agent of each property selected in the survey sample.

In order to capture changes in owner expenses for heating multi-family buildings in NYC, an additional section was added to the Owner Survey entitled Heating Characteristics. Specifically, staff was trying to identify the type of heating systems being used by owners in their buildings and the cost for using these systems over the past year. This section was last included in the 2001 Owner Survey. The impact of this survey is discussed in the "Utility Cost Computations" and "Fuel Oil" sections of the Methodology.

Roughly 12.5% of the questionnaires mailed out were returned to the RGB, down from over 14% last year. A total of 600 returned surveys contained usable information, from which quotes of owners' annual insurance costs (534), non-union labor quotes (154) and management fees (72) were validated. The number of verified prices in 2011 and 2012 for the Owner Survey is shown in Appendix 1. In addition, 581 surveys contained information regarding the heating characteristics of multi-family buildings.

Utility Cost Computations

The Utilities component consists of costs for electricity, gas, steam, telephone, and water and sewer. RGB staff calculates a hypothetical monthly bill for utilities based in part on supply rates, fuel adjustments, delivery

charges, taxes, and other surcharges and fees. Bills are calculated based on typical usage in a multi-family building in New York City, an amount that remains constant from year to year. Where the component represents prices to heat a building, such as Spec 406 (gas), monthly price data is adjusted to account for changes in weather. Water and sewer price changes are based on annual rate adjustments set by the NYC Water Board. Telephone prices are determined by calculating a hypothetical bill based on rates provided by Verizon. The price relatives for the Utilities component were calculated using the most recent 12-month period from April-March and comparing it to the prior April-March period.

As discussed in the Owner Survey section of the Methodology, this year staff conducted a Heating Characteristics survey of rent stabilized buildings in order to see if the Price Index was accurately measuring owners' expenditures for heating their buildings. This survey was last conducted in 2001.

Heating costs are captured in both the Fuel Oil component and the Utilities component. While the majority of heating costs are still spent on fuel oil, the most current survey showed a shift towards natural gas. Therefore, weight was distributed from the Fuel Oil component to the Utilities component. The Utilities component includes heating via natural gas, steam, or electricity.

Fuel Oil

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

This year there was a redistribution of weight from the Fuel Oil component to the Utilities component due to a shift toward heating buildings with natural gas. For an explanation of this change, see "Utility Cost Computations" in the Methodology section of this report.

Real Estate Tax Computations

The sample of buildings used to compute the 2012 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 over 35,000 buildings in FY 2011 and FY 2012. This data was used to compute a tax bill for each stabilized building in each of these fiscal years. The change computed for the PIOC is simply the percentage difference in aggregate tax bills for these buildings from FY 2011 to FY 2012.

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 679 recorded price quotes were gathered. For a description of the items priced and the number of price quotations obtained for each item, refer to Appendix 1. (See Endnote 4)

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 and Heating Degree Days. These items are used in computing some of the labor components, and the cost-weighted changes in fuel oil and utility prices.

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. This year projections are based on the time period from April 2012 to March 2013.

Taxes were projected by using data from the Department of Finance's tentative assessment roll for FY 2013 along with estimates to the change in class 2 property levy share, 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 calculating the average wage increase of the most recent labor contracts for apartment workers union Local 32-BJ and a ten-year geometric average of all other Labor items. Fuel oil 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.[8]

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

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Endnotes

1. The Fuel Oil component was entitled "Fuel" in previously PIOCs. This change was made to eliminate any confusion as to whether this component included other fuel types used for heating. The Fuel Oil component measures the cost of heating rent stabilized building with #2, #4, and #6 fuel oil.

2. The average CPI for All Urban Consumers, New York-Northeastern New Jersey for the year from March 2010 to February 2011 (241.6) compared to the average for the year from March 2011 to February 2012 (248.8) rose by 3.0%. This is the latest available CPI data and is roughly analogous to the 'PIOC year', which for the majority of components compare the most recent point-to-point figures from April to March, monthly cost-weighted figures from April to March, or the two most recent fiscal year bills.

3. Due to changes in methodology of the 2010 Price Index, the cost-weight relatives are now calculated on an April to March time period. The April 2011 to March 2012 time period was 15.3% warmer than the previous April to March period. "Normal" weather refers to the typical number of Heating Degree Days measured at Central Park, New York City, over the 30-year period from 1981-2010. A Heating Degree Day is defined as, for one day, the number of degrees that the average temperature for that day is below 65 degrees Fahrenheit.

4. Item 608, Ledger Paper, has been removed from this year's Price Index due to the difficulty in obtaining pricing for this item in the past several years indicating that owners and/or managers of multi-family buildings are no longer using this item. The weight attributed to this item was redistributed to the other items within the Administrative Costs component and it will not be included in future indices.

5. The following assumptions were used in the computation of the commensurates: (1) the required change in landlord revenue is 67.5% of the 2012 PIOC increase of 2.8%, or 1.9%. The 67.1% 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 32.5% times the latest 12-month increase in the CPI ending February 2012 (3.0%) or 0.97%; (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 2008 Housing and Vacancy Survey; (5) for the commensurate formulae, including a vacancy assumption, the 7.32% median increase in vacancy leases found in the rent stabilized apartments that reported a vacancy lease in the 2011 apartment registration file from the Division of Housing and Community Renewal was used; and (6) the collectability of these commensurate adjustments are assumed.

6. Calculating the "traditional" commensurate rent adjustment requires an assumption about next year's PIOC. In this case, the 7.0% PIOC projection for 2013 is used.

7. Whether profits will actually decline depends on the level of inflation, the composition of NOI (i.e., how much is debt service and how much is profit), and changes in tax law and interest rates.

8. Source: "Short-Term Energy Outlook," March 2012. U.S. Energy Information Administration, Department of Energy.

Appendices

1. PIOC Sample, Number of Price Quotes per Item, 2011 vs. 2012

Spec	Description	2011	2012
211	Apartment Value	125	104
212	Non-Union Super	79	102
216	Non-Union Janitor/Porter	40	52
	LABOR COSTS	244	258
301	Fuel Oil #2	21	22
302	Fuel Oil #4	5	5
303	Fuel Oil #6	5	5
	FUEL OIL	31	32
501	Repainting	128	126
502	Plumbing, Faucet	33	33
503	Plumbing, Stoppage	35	32
504	Elevator #1, 6 fl., 1 e.	10	12
505	Elevator #2, 13 fl., 2 e.	10	12
506	Elevator #3, 19 fl., 3 e.	10	11
507	Burner Repair	10	11
508	Boiler Repair, Tube	10	10
509	Boiler Repair, Weld	5	7
510	Refrigerator Repair	8	5
511	Range Repair	12	10
512	Roof Repair	22	23
513	Air Conditioner Repair	10	6
514	Floor Maint. #1, Studio	7	5
515	Floor Maint. #2, 1 Br.	7	5
516	Floor Maint. #3, 2 Br.	5	5
518	Linen/Laundry Service	6	5
	CONTRACTOR SERVICES	328	318
601	Management Fees	93	72
602	Accountant Fees	28	27
603	Attorney Fees	21	21
604	Newspaper Ads	18	18
605	Agency Fees	3	5
606	Lease Forms	9	7
607	Bill Envelopes	11	10
608*	Ledger Paper	5	N/A
	ADMINISTRATIVE COSTS	190	150

Spec	Description	2011	2012
701	INSURANCE COSTS	573	534
801	Light Bulbs	6	13
802	Light Switch	5	12
803	Wet Mop	8	11
804	Floor Wax	9	11
805	Paint	10	12
806	Pushbroom	8	14
807	Detergent	7	7
808	Bucket	12	11
809	Washers	11	12
810	Linens	10	10
811	Pine Disinfectant	10	13
812	Window/Glass Cleaner	10	13
813	Switch Plate	11	12
814	Duplex Receptacle	10	13
815	Toilet Seat	12	14
816	Deck Faucet	13	13
	PARTS & SUPPLIES	152	191
901	Refrigerator #1	7	8
902	Refrigerator #2	10	10
903	Air Conditioner #1	7	8
904	Air Conditioner #2	6	5
905	Floor Runner	9	8
906	Dishwasher	5	8
907	Range #1	8	8
908	Range #2	7	6
909	Carpet	11	11
910	Dresser	5	5
911	Mattress & Box Spring	5	5
	REPLACEMENT COSTS	80	82
	ALL ITEMS	1,598	1,565

*Note: Item 608, Ledger Paper, has been removed from this year's Price Index due to the difficulty in obtaining pricing for this item in the past several years indicating that owners and/or managers of multi-family buildings are no longer using this item. It will not be used in future indices.

2. Expenditure Weights, Price Relatives, Percent Changes and Standard Errors, All Apartments, 2012

Spec #	Item Description	Expenditure Weights	Price Relative	% Change	Standard Error
101	TAXES	**0.2833**	**1.0747**	**7.47%**	**0.1529**
201	Payroll, Bronx, All (Union)	0.1013	1.0139	1.39%	0.0000
202	Payroll, Other, Union, Supts.	0.1018	1.0193	1.93%	0.0000
203	Payroll, Other, Union, Other	0.2529	1.0190	1.90%	0.0000
204	Payroll, Other, Non-Union, All	0.2927	1.0217	2.17%	0.3835
205	Social Security Insurance	0.0432	1.0194	1.94%	0.0000
206	Unemployment Insurance	0.0068	0.9582	-4.18%	0.0000
207	Private Health & Welfare	0.2013	1.0489	4.89%	0.0000
	LABOR COSTS	**0.1292**	**1.0249**	**2.49%**	**0.1123**
301	Fuel Oil #2	0.5141	1.0027	0.27%	0.5484
302	Fuel Oil #4	0.2522	1.0275	2.75%	0.7449
303	Fuel Oil #6	0.2337	1.0342	3.42%	0.7044
	FUEL OIL	**0.1330**	**1.0163**	**1.63%**	**0.3767**
401	Electricity #1, 2,500 KWH	0.0073	0.9775	-2.25%	0.0000
402	Electricity #2, 15,000 KWH	0.0921	0.9136	-8.64%	0.0000
403	Electricity #3, 82,000 KWH	0.0000	0.7780	-22.20%	0.0000
404	Gas #1, 12,000 therms	0.0029	0.9547	-4.53%	0.0000
405	Gas #2, 65,000 therms	0.0574	0.7669	-23.31%	0.0000
406	Gas #3, 214,000 therms	0.2502	0.7624	-23.76%	0.0000
407	Steam #1, 1.2m lbs	0.0151	0.9350	-6.50%	0.0000
408	Steam #2, 2.6m lbs	0.0050	0.9360	-6.40%	0.0000
409	Telephone	0.0070	1.0128	1.28%	0.0000
410	Water & Sewer	0.5629	1.0750	7.50%	0.0000
	UTILITIES	**0.1750**	**0.9599**	**-4.01%**	**0.0000**
501	Repainting	0.3816	1.0347	3.47%	1.3583
502	Plumbing, Faucet	0.1435	1.0365	3.65%	1.3549
503	Plumbing, Stoppage	0.1271	1.0180	1.80%	1.4585
504	Elevator #1, 6 fl., 1 e.	0.0547	1.0343	3.43%	1.4647
505	Elevator #2, 13 fl., 2 e.	0.0357	1.0139	1.39%	0.6417
506	Elevator #3, 19 fl., 3 e.	0.0198	1.0196	1.96%	0.7634
507	Burner Repair	0.0379	1.0186	1.86%	1.3204
508	Boiler Repair, Tube	0.0534	0.9909	-0.91%	0.9000
509	Boiler Repair, Weld	0.0413	1.0222	2.22%	1.1650
510	Refrigerator Repair	0.0118	1.0513	5.13%	2.1719
511	Range Repair	0.0111	1.0420	4.20%	1.4710
512	Roof Repair	0.0698	1.0915	9.15%	2.6633
513	Air Conditioner Repair	0.0077	1.0267	2.67%	1.4559
514	Floor Maint. #1, Studio	0.0003	1.0345	3.45%	3.4157
515	Floor Maint. #2, 1 Br.	0.0004	1.0383	3.83%	3.6678
516	Floor Maint. #3, 2 Br.	0.0039	1.0362	3.62%	3.5429
	CONTRACTOR SERVICES	**0.1191**	**1.0325**	**3.25%**	**0.6252**

Spec #	Item Description	Expenditure Weights	Price Relative	% Change	Standard Error
601	Management Fees	0.7403	1.0304	3.04%	1.0330
602	Accountant Fees	0.1327	1.0080	0.80%	0.5738
603	Attorney Fees	0.1009	1.0187	1.87%	0.8062
604	Newspaper Ads	0.0039	1.0169	1.69%	0.6769
605	Agency Fees	0.0051	1.0000	0.00%	0.0000
606	Lease Forms	0.0085	1.0146	1.46%	1.5843
607	Bill Envelopes	0.0086	1.0158	1.58%	1.0631
	ADMINISTRATIVE COSTS	**0.0717**	**1.0258**	**2.58%**	**0.7730**
701	INSURANCE COSTS	**0.0684**	**1.0251**	**2.51%**	**0.7601**
801	Light Bulbs	0.0344	1.0221	2.21%	1.4430
802	Light Switch	0.0423	1.0273	2.73%	1.8224
803	Wet Mop	0.0371	1.0231	2.31%	1.2912
804	Floor Wax	0.0443	1.0360	3.60%	1.8892
805	Paint	0.2405	1.0774	7.74%	2.5923
806	Pushbroom	0.0317	1.0313	3.13%	2.0371
807	Detergent	0.0344	1.0214	2.14%	1.4298
808	Bucket	0.0363	1.0184	1.84%	1.3073
809	Washers	0.0962	1.0000	0.00%	0.0000
811	Pine Disinfectant	0.0562	1.0309	3.09%	1.3067
812	Window/Glass Cleaner	0.0516	1.0393	3.93%	1.8467
813	Switch Plate	0.0435	1.0049	0.49%	0.5171
814	Duplex Receptacle	0.0308	1.0229	2.29%	1.6151
815	Toilet Seat	0.0955	1.0284	2.84%	1.5878
816	Deck Faucet	0.1250	1.0339	3.39%	1.4018
	PARTS AND SUPPLIES	**0.0143**	**1.0370**	**3.70%**	**0.6974**
901	Refrigerator #1	0.0957	1.0301	3.01%	1.6812
902	Refrigerator #2	0.4663	1.0304	3.04%	2.0839
903	Air Conditioner #1	0.0166	1.0215	2.15%	1.5151
904	Air Conditioner #2	0.0208	1.0118	1.18%	1.1430
905	Floor Runner	0.0860	1.0536	5.36%	2.9980
906	Dishwasher	0.0503	1.0171	1.71%	0.9033
907	Range #1	0.0489	1.0328	3.28%	1.3237
908	Range #2	0.2154	1.0349	3.49%	2.2604
	REPLACEMENT COSTS	**0.0061**	**1.0323**	**3.23%**	**1.1319**
	ALL ITEMS	**1.0000**	**1.0277**	**2.77%**	**0.1267**

3. Price Relative by Building Type, Apartments, 2012

Spec #	Item Description	Pre-1947	Post-1946	Gas Heated	Oil Heated	MASTER METERED BLDGS
101	TAXES	7.5%	7.4%	7.5%	7.5%	7.5%
201-207	LABOR COSTS	2.4%	2.6%	2.5%	2.5%	2.3%
301-303	FUEL OIL	1.6%	2.0%	0.3%	1.6%	0.3%
401-410	UTILITIES	-4.6%	-6.2%	-10.2%	4.2%	-10.6%
501-516	CONTRACTOR SERVICES	3.3%	3.1%	3.3%	3.2%	3.0%
601-607	ADMINISTRATIVE COSTS	2.5%	2.7%	2.6%	2.6%	2.1%
701	INSURANCE COSTS	2.5%	2.5%	2.5%	2.5%	2.5%
801-816	PARTS AND SUPPLIES	3.7%	3.7%	3.9%	3.6%	3.2%
901-908	REPLACEMENT COSTS	3.3%	3.1%	3.0%	3.3%	3.6%
	ALL ITEMS	**2.2%**	**2.9%**	**0.6%**	**3.9%**	**1.3%**

4. Price Relative by Hotel Type, 2012

Spec #	Item Description	Hotel	Rooming House	SRO
101	TAXES	15.8%	8.2%	7.0%
205-206, 208-216	LABOR COSTS	2.9%	2.4%	2.3%
301-303	FUEL OIL	1.3%	0.3%	2.6%
401-407, 409-410	UTILITIES	-10.3%	0.6%	-11.5%
501-516, 518	CONTRACTOR SERVICES	5.1%	3.6%	2.7%
601-607	ADMINISTRATIVE COSTS	2.6%	2.2%	2.4%
701	INSURANCE COSTS	2.5%	2.5%	2.5%
801-816	PARTS AND SUPPLIES	1.7%	4.1%	3.2%
901-904, 907-911	REPLACEMENT COSTS	1.8%	2.2%	2.3%
	ALL ITEMS	**6.7%**	**3.7%**	**1.3%**

5. Percentage Change in Real Estate Tax Sample by Borough and Source of Change, Apartments and Hotels, 2012

	% Change Due to Assessments	% Change Due to Exemptions	% Change Due to Abatements	% Change Due to Tax Rates	% Change Due to Interactions	Total % Change
APARTMENTS						
Manhattan	8.40%	0.03%	-0.01%	0.71%	0.06%	9.18%
Bronx	2.49%	-0.21%	0.00%	0.68%	0.01%	2.97%
Brooklyn	5.71%	-1.80%	0.01%	0.67%	0.03%	4.62%
Queens	5.36%	-0.73%	-0.02%	0.68%	0.03%	5.31%
Staten Island	4.56%	-5.31%	-0.13%	0.68%	-0.01%	-0.21%
All Apartments	**7.08%**	**-0.37%**	**0.00%**	**0.70%**	**0.05%**	**7.47%**
Hotel	16.03%	0.50%	0.00%	-0.64%	-0.13%	15.77%
Rooming House	7.48%	-0.05%	0.00%	0.74%	0.04%	8.22%
SRO	6.42%	0.17%	-0.01%	0.35%	0.06%	6.99%
All Hotels	**10.82%**	**0.29%**	**-0.01%**	**-0.03%**	**-0.03%**	**11.05%**

Note: Totals may not add due to rounding.

6. Tax Change by Borough and Community Board, Apartments, 2012

Borough	Community Board	Number of Buildings	Tax Relative
Manhattan		**11,988**	**9.18%**
	1	83	10.60%
	2	1,054	9.45%
	3	1,485	8.85%
	4	929	19.64%
	5	257	9.27%
	6	805	7.31%
	7	1,697	11.16%
	8	1,934	7.02%
	9	737	11.66%
	10	823	9.01%
	11	629	6.50%
	12	1,367	7.09%
Lower		**7,848**	**9.32%**
Upper		**4,140**	**8.34%**
Bronx		**5,311**	**2.97%**
	1	386	-3.85%
	2	255	-2.56%
	3	350	-4.78%
	4	732	-0.05%
	5	664	0.88%
	6	502	-8.11%
	7	932	5.24%
	8	336	5.69%
	9	296	13.53%
	10	188	5.51%
	11	294	1.19%
	12	353	5.41%
Brooklyn		**11,848**	**4.62%**
	1	1,412	2.99%
	2	573	-3.93%
	3	860	8.94%
	4	1,269	-2.41%
	5	382	3.60%
	6	849	7.39%
	7	806	4.18%
	8	896	4.48%
	9	527	6.87%
	10	757	6.75%
	11	662	6.49%
	12	549	3.11%
	13	161	6.93%
	14	842	5.66%
	15	348	5.54%
	16	307	-1.29%
	17	559	5.97%
	18	82	7.29%
Queens		**5,951**	**5.31%**
	1	1,754	2.95%
	2	781	3.49%
	3	398	6.86%
	4	390	4.90%
	5	1,114	4.08%
	6	290	5.10%
	7	404	6.93%
	8	152	8.25%
	9	204	7.85%
	10	48	10.05%
	11	74	4.09%
	12	159	8.39%
	13	32	2.27%
	14	79	8.11%
Staten Island		**163**	**-0.21%**
	1	114	-1.15%
	2	27	-0.70%
	3	21	0.00%
ALL		**35,261**	**7.47%**

Note: No Community Board (CB) could be assigned to the following number of buildings for each borough: Manhattan (159), Bronx (23), Brooklyn (7), Queens (72), Staten Island (1). The number of buildings in the category "All" for each borough includes these buildings which could not be assigned a Community Board. In addition, 29 buildings in Manhattan are a part of Community Board 8 in the Bronx. These buildings are not included in the total for CB 8 in the Bronx but are represented in the Manhattan total and the total for "ALL" buildings. Core and Upper Manhattan building totals are defined by block count and cannot be calculated by using Community Board numbers alone.

7. Expenditure Weights, Price Relatives, Percent Changes and Standard Errors, All Hotels, 2012

Spec #	Item Description	Expenditure Weights	Price Relative	% Change	Standard Error
101	TAXES	**0.3221**	**1.1105**	**11.05%**	**0.9268**
205	Social Security Insurance	0.0512	1.0194	1.94%	0.0000
206	Unemployment Insurance	0.0143	0.9582	-4.18%	0.0000
208	Hotel Private Health/Welfare	0.0496	1.0359	3.59%	0.0000
209	Hotel Union Labor	0.3159	1.0359	3.59%	0.0000
210	SRO Union Labor	0.0123	1.0364	3.64%	0.0000
211	Apartment Value	0.1190	1.0290	2.90%	0.5560
212	Non-Union Superintendent	0.3113	1.0211	2.11%	0.4550
213	Non-Union Maid	0.0000	0.0000	NA	0.0000
214	Non-Union Desk Clerk	0.0000	0.0000	NA	0.0000
215	Non-Union Maint. Worker	0.0000	0.0000	NA	0.0000
216	Non-Union Janitor/Porter	0.1264	1.0235	2.35%	0.7164
	LABOR COSTS	**0.1464**	**1.0270**	**2.70%**	**0.1807**
301	Fuel Oil #2	0.6322	1.0027	0.27%	0.5484
302	Fuel Oil #4	0.0170	1.0275	2.75%	0.7449
303	Fuel Oil #6	0.3508	1.0342	3.42%	0.7044
	FUEL OIL	**0.1636**	**1.0142**	**1.42%**	**0.4259**
401	Electricity #1, 2,500 KWH	0.0649	0.9775	-2.25%	0.0000
402	Electricity #2, 15,000 KWH	0.0698	0.9136	-8.64%	0.0000
403	Electricity #3, 82,000 KWH	0.2282	0.7780	-22.20%	0.0000
404	Gas #1, 12,000 therms	0.0406	0.9547	-4.53%	0.0000
405	Gas #2, 65,000 therms	0.0382	0.7669	-23.31%	0.0000
406	Gas #3, 214,000 therms	0.1718	0.7624	-23.76%	0.0000
407	Steam #1, 1.2m lbs	0.0003	0.9350	-6.50%	0.0000
409	Telephone	0.1636	1.0128	1.28%	0.0000
410	Water & Sewer	0.2226	1.0750	7.50%	0.0000
	UTILITIES	**0.1307**	**0.9091**	**-9.09%**	**0.0000**
501	Repainting	0.2146	1.0347	3.47%	1.3583
502	Plumbing, Faucet	0.0917	1.0365	3.65%	1.3549
503	Plumbing, Stoppage	0.0859	1.0180	1.80%	1.4585
504	Elevator #1, 6 fl., 1 e.	0.0378	1.0343	3.43%	1.4647
505	Elevator #2, 13 fl., 2 e.	0.0340	1.0139	1.39%	0.6417
506	Elevator #3, 19 fl., 3 e.	0.0310	1.0196	1.96%	0.7634
507	Burner Repair	0.0280	1.0186	1.86%	1.3204
508	Boiler Repair, Tube	0.0355	0.9909	-0.91%	0.9000
509	Boiler Repair, Weld	0.0325	1.0222	2.22%	2.1719
511	Range Repair	0.1317	1.0420	4.20%	1.4710
512	Roof Repair	0.0318	1.0915	9.15%	2.6633
513	Air Conditioner Repair	0.0402	1.0267	2.67%	1.4559
514	Floor Maint. #1, Studio	0.0008	1.0345	3.45%	3.4157
515	Floor Maint. #2, 1 Br.	0.0017	1.0383	3.83%	3.6678
516	Floor Maint. #3, 2 Br.	0.0151	1.0362	3.62%	3.5429
518	Linen/Laundry Service	0.1878	1.0943	9.43%	9.1002
	CONTRACTOR SERVICES	**0.0720**	**1.0435**	**4.35%**	**1.7596**
601	Management Fees	0.6777	1.0304	3.04%	1.0330
602	Accountant Fees	0.0782	1.0080	0.80%	0.5738
603	Attorney Fees	0.1068	1.0187	1.87%	0.8062
604	Newspaper Ads	0.0928	1.0169	1.69%	0.6769
605	Agency Fees	0.0231	1.0000	0.00%	0.0000
606	Lease Forms	0.0097	1.0146	1.46%	1.5843
607	Bill Envelopes	0.0117	1.0158	1.58%	1.0631
	ADMINISTRATIVE COSTS	**0.0777**	**1.0251**	**2.51%**	**0.7098**
701	INSURANCE COSTS	**0.0377**	**1.0251**	**2.51%**	**0.7601**
801	Light Bulbs	0.0152	1.0221	2.21%	1.4430
802	Light Switch	0.0171	1.0273	2.73%	1.8224
803	Wet Mop	0.0471	1.0231	2.31%	1.2912
804	Floor Wax	0.0593	1.0360	3.60%	1.8892
805	Paint	0.1418	1.0774	7.74%	2.5923
806	Pushbroom	0.0387	1.0313	3.13%	2.0371
807	Detergent	0.0494	1.0214	2.14%	1.4298
808	Bucket	0.0476	1.0184	1.84%	1.3073
809	Washers	0.0516	1.0000	0.00%	0.0000
810	Linens	0.2738	1.0000	0.00%	0.0081
811	Pine Disinfectant	0.0236	1.0309	3.09%	1.3067
812	Window/Glass Cleaner	0.0214	1.0393	3.93%	1.8467
813	Switch Plate	0.0553	1.0049	0.49%	0.5171
814	Duplex Receptacle	0.0399	1.0229	2.29%	1.6151
815	Toilet Seat	0.0511	1.0284	2.84%	1.5878
816	Deck Faucet	0.0671	1.0339	3.39%	1.4018
	PARTS AND SUPPLIES	**0.0350**	**1.0246**	**2.46%**	**0.4369**
901	Refrigerator #1	0.0210	1.0301	3.01%	1.6812
902	Refrigerator #2	0.1016	1.0304	3.04%	2.0839
903	Air Conditioner #1	0.0605	1.0215	2.15%	1.5151
904	Air Conditioner #2	0.0722	1.0118	1.18%	1.1430
907	Range #1	0.0094	1.0328	3.28%	1.3237
908	Range #2	0.0426	1.0349	3.49%	2.2604
909	Carpet	0.3480	1.0157	1.57%	1.1939
910	Dresser	0.1766	1.0240	2.40%	2.5461
911	Mattress & Box Spring	0.1681	1.0145	1.45%	1.4615
	REPLACEMENT COSTS	**0.0149**	**1.0198**	**1.98%**	**0.7113**
	ALL ITEMS	**1.0000**	**1.0372**	**3.72%**	**0.3390**

8. Expenditure Weights and Price Relatives, Lofts, 2012

Spec #	Item Description	Weights	Price Relative
101	TAXES	**0.2836**	**7.47%**
201	Payroll, Bronx, All"	0.0000	1.39%
202	Payroll, Other, Union, Supts.	0.2456	1.93%
203	Payroll, Other, Union, Other	0.0000	1.90%
204	Payroll, Other, Non-Union, All	0.5380	2.17%
205	Social Security Insurance	0.0412	1.94%
206	Unemployment Insurance	0.0073	-4.18%
207	Private Health & Welfare	0.1679	4.89%
	LABOR COSTS	**0.0883**	**2.51%**
301	Fuel Oil #2	0.2854	0.27%
302	Fuel Oil #4	0.5891	2.75%
303	Fuel Oil #6	0.1255	3.42%
	FUEL OIL	**0.1141**	**2.13%**
401	Electricity #1, 2,500 KWH	0.0086	-2.25%
402	Electricity #2, 15,000 KWH	0.1104	-8.64%
403	Electricity #3, 82,000 KWH	0.0000	-22.20%
404	Gas #1, 12,000 therms	0.0035	-4.53%
405	Gas #2, 65,000 therms	0.0464	-23.31%
406	Gas #3, 214,000 therms	0.1288	-23.76%
407	Steam #1, 1.2m lbs	0.0179	-6.50%
408	Steam #2, 2.6m lbs	0.0059	-6.40%
409	Telephone	0.0084	1.28%
410	Water & Sewer	0.6700	7.50%
	UTILITIES	**0.0847**	**-0.25%**
501	Repainting	0.3815	3.47%
502	Plumbing, Faucet	0.1436	3.65%
503	Plumbing, Stoppage	0.1271	1.80%
504	Elevator #1, 6 fl., 1 e.	0.0547	3.43%
505	Elevator #2, 13 fl., 2 e.	0.0358	1.39%
506	Elevator #3, 19 fl., 3 e.	0.0198	1.96%
507	Burner Repair	0.0379	1.86%
508	Boiler Repair, Tube	0.0534	-0.91%
509	Boiler Repair, Weld	0.0414	2.22%
510	Refrigerator Repair	0.0118	5.13%
511	Range Repair	0.0111	4.20%
512	Roof Repair	0.0697	9.15%
513	Air Conditioner Repair	0.0077	2.67%
514	Floor Maint. #1, Studio	0.0002	3.45%
515	Floor Maint. #2, 1 Br.	0.0005	3.83%
516	Floor Maint. #3, 2 Br.	0.0039	3.62%
	CONTRACTOR SERVICES	**0.0668**	**3.25%**

Spec #	Item Description	Weights	Price Relative
	ADMINISTRATIVE COSTS, LEGAL	**0.0669**	**1.87%**
601	Management Fees	0.8320	3.04%
602	Accountant Fees	0.1377	0.80%
604	Newspaper Ads	0.0046	1.69%
605	Agency Fees	0.0061	0.00%
606	Lease Forms	0.0089	1.46%
607	Bill Envelopes	0.0106	1.58%
	ADMINISTRATIVE COSTS - OTHER	**0.0941**	**2.68%**
701	INSURANCE COSTS	**0.1734**	**2.51%**
801	Light Bulbs	0.0343	2.21%
802	Light Switch	0.0423	2.73%
803	Wet Mop	0.0371	2.31%
804	Floor Wax	0.0444	3.60%
805	Paint	0.2404	7.74%
806	Pushbroom	0.0317	3.13%
807	Detergent	0.0344	2.14%
808	Bucket	0.0363	1.84%
809	Washers	0.0963	0.00%
811	Pine Disinfectant	0.0561	3.09%
812	Window/Glass Cleaner	0.0516	3.93%
813	Switch Plate	0.0434	0.49%
814	Duplex Receptacle	0.0309	2.29%
815	Toilet Seat	0.0955	2.84%
816	Deck Faucet	0.1251	3.39%
	PARTS AND SUPPLIES	**0.0156**	**3.70%**
901	Refrigerator #1	0.0957	3.01%
902	Refrigerator #2	0.4663	3.04%
903	Air Conditioner #1	0.0166	2.15%
904	Air Conditioner #2	0.0208	1.18%
905	Floor Runner	0.0859	5.36%
906	Dishwasher	0.0504	1.71%
907	Range #1	0.0488	3.28%
908	Range #2	0.2155	3.49%
	REPLACEMENT COSTS	**0.0123**	**3.23%**
	ALL ITEMS	**1.0000**	**3.69%**