

# The Rent Guidelines Board 1998 Price Index of Operating Costs

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April 28, 1998

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### Introduction

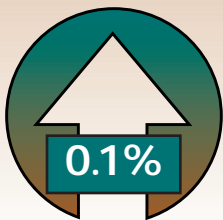
Much like the Consumer Price Index (CPI), the Price Index of Operating Costs for Rent-Stabilized Apartment Buildings (PIOC) measures the price change in a market basket of goods and services. But while the CPI examines changes in consumers' "cost of living," the PIOC gauges changes in the operating and maintenance costs of stabilized buildings. By measuring and aggregating many types of cost changes – real estate taxes, attorney fees, toilet seats, and dozens of other items – the PIOC shows how landlords' costs have been affected over the previous year.

The original PIOC expenditure weights and market basket were devised by the U.S. Bureau of Labor Statistics (BLS) which was retained by the RGB as the PIOC contractor from 1970 to 1981. From 1982 to 1990, the PIOC was prepared by private consulting firms. In 1991, the RGB staff's growing expertise and familiarity made it possible to move the PIOC "in house."

This is the eighth year that the RGB staff has produced the price index and the third year that the index has been undertaken without the assistance of Speedwell Inc. In previous years Speedwell had prepared the tax and water/sewer components of the PIOC. RGB staff's growing computer expertise made it possible to take on these final elements of the price index.

The PIOC consists of several surveys, each designed to measure changes in one or more types of operating cost. These are described in the following sections of this report.

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



### Owner Survey

The Owner Survey gathers information on management fees, insurance, and non-union labor from building managers and owners. Survey forms, accompanied by a letter describing the purpose of the PIOC, were mailed to the owners or managing agents of stabilized buildings. If the survey form was returned, the owner/manager was contacted by an interviewer to verify the information and to obtain additional information if necessary. All of the price quotes of the owner/managing agents were confirmed by calling the insurance and management companies and non-union employees.

The sample frame for the Owner Survey included nearly 40,000 stabilized buildings registered with DHCR in 1995. A stratified sampling scheme was used to choose 6,350 addresses from this pool for the owner mailing. The number of buildings chosen in each borough was proportional to the concentration of stabilized buildings in that borough. Roughly 11% of the surveys mailed out were returned to the RGB. A total of 429 of these contained information which was used. The number of verified price quotes in 1997 and 1998 for the Owner Survey is shown in Appendix I.

### WHAT'S NEW

- ✓ The Price Index of Operating Costs for Rent-Stabilized Apartment Buildings (PIOC) was nearly unchanged this year, rising a mere 0.1%.
- ✓ Costs in pre-war buildings fell 0.5%.
- ✓ The PIOC was lower than projected (1.8%) mainly because of a sharp and unexpected drop (-15%) in fuel oil prices.
- ✓ The "core" PIOC, which excludes the erratic changes in fuel oil, natural gas, and electricity costs, is useful for analyzing inflationary trends. The core rose by 2.3% this year.
- ✓ Real estate taxes rose only 1.2%, a surprisingly low figure at this stage in the economic cycle.
- ✓ Labor costs went up only 2.7% this year, the second lowest rate of increase since 1976. The "new hire" provisions of last year's 32B-32J settlement had no impact on the PIOC.
- ✓ Contractor services and administrative costs rose 2.7% and 3.3% respectively, in line with the trend of the past several years.
- ✓ Insurance costs dipped slightly (-1.5%) after rising significantly in the prior three years. There are increasing signs of competition in the insurance industry.
- ✓ The Price Index for Apartments is projected to increase 3.5% next year.
- ✓ Traditionally, RGB staff has computed a "commensurate rent increase" based on the PIOC. The commensurate is the rent increase needed to compensate landlords for increases in O&M costs while maintaining net operating income at a constant level in nominal dollars. The commensurate is 0% for a one year lease and 1.1% for a two year lease (see page 10 for details and alternate versions of the commensurate rent adjustment).

## Fuel Oil Vendor Survey

Fuel price information has been gathered on a monthly basis for the past several years. 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). Calling vendors each month minimizes the likelihood of misreporting and also reduces the reporting burden for the companies which do not care to look up a year's worth of prices. Finally, the monthly survey shifts some staff work out of the very busy Spring period. Only a few vendors declined to participate each month. The number of fuel quotes gathered this year was comparable to last year and is contained in Appendix I.

## Real Estate Tax Computations

A list of rent-stabilized properties was provided to the Department of Finance, which "matched" this list against its records to provide data on assessed value, tax exemptions, and tax abatements for approximately 36,000 buildings in FY 1997 and FY 1998. A new and more up-to-date list of rent-stabilized buildings was used this year – it included buildings which registered with the Division of Housing and Community Renewal in 1995.

The Finance Department data was used to compute a tax bill for each stabilized building in FY 1997 and FY 1998. The change computed for the PIOC is simply the percentage increase in aggregate tax bills from FY 1997 to FY 1998.

## Vendor Survey

The Vendor Survey is used to gather price quotes for Contractor Services (e.g. painting), Administrative Costs (e.g. management and attorney fees), Parts & Supplies (e.g. mops), and Replacement Costs (e.g. refrigerators). As in prior years, an effort was made to update the vendor database by adding new vendors and deleting those who no longer carry the products in question. All vendor quotes were obtained over the telephone. The telephone procedures used for gathering price quotes were unchanged from prior years. The number of price quotes was about the same as in 1997. For a detailed description of the items priced and the number of price quotations obtained for each item, refer to Appendix I.

## Other Items

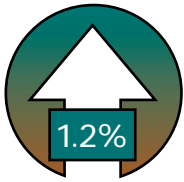
In addition to the items previously discussed, a number of other pieces of information are needed to complete the PIOC, including union contract and benefit information, Social Security rates, unemployment insurance rates, heating degree days, and utility rate schedules. These items are used in computing some of the labor components, changes in utility costs for electricity, gas, steam, and telephone, and the cost weighted-change in fuel prices.

### CHANGE IN COSTS FOR RENT-STABILIZED APARTMENT BUILDINGS, APRIL 1997 TO APRIL 1998

Taxes	1.2%
Labor Costs	2.7%
Utilities Costs	2.3%
Fuel Costs	-15.0%
Contractor Services	2.7%
Administrative Costs	3.3%
Insurance Costs	-1.5%
Parts & Supplies	1.9%
Replacement Costs	0.6%
All Costs	0.1%

## Price Index Components

### Taxes



The tax component of the Price Index is based entirely on real estate taxes. The change in taxes is estimated by comparing aggregate taxes levied on rent-stabilized apartment houses in FY 1997 and FY 1998 (For additional detail on how the tax computation compares to last year see the earlier section "Real Estate Tax Computations"). The tax data was obtained from the Department of Finance.

Real Estate taxes rose minimally this year, up 1.2%. The change in taxes was largely due to a small increase in assessments; a net expiration of tax exemptions and abatements also contributed to the increase. For the first time in several years, the tax rate fell slightly.

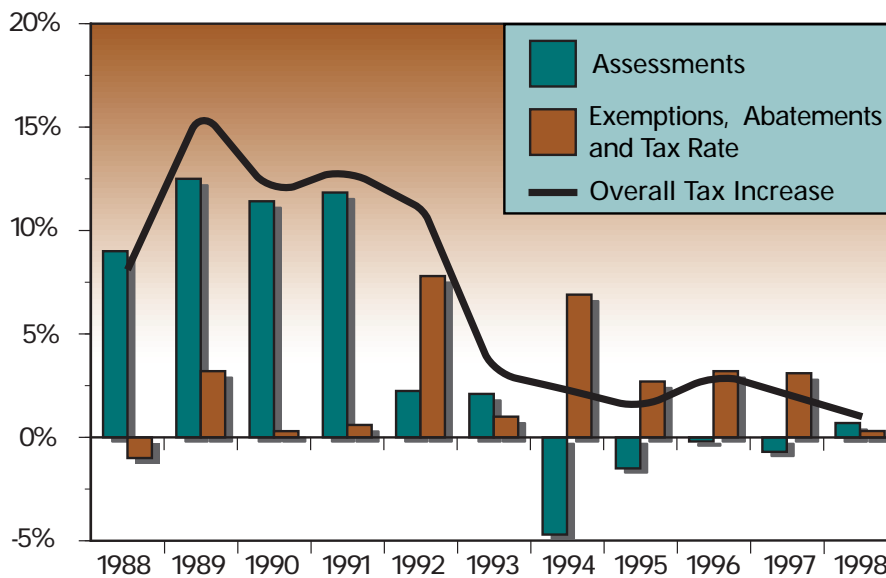
✓ **Tax Rate** – Although the total tax levy for all properties in the City (commercial and residential) has not increased significantly for several years, the distribution of the levy among property classes has shifted from year to year. In recent years, more of the tax burden has fallen on Class Two properties, the category which contains the vast majority of rent-stabilized buildings.

In FY 1996 and FY 1997 intervention by the Mayor and the City Council softened the blow to rent-stabilized properties. In FY 1996 the tax rate would have risen 5.6% had the City Council not intervened and limited the increase to 2.4%. A similar course of events led to an increase in the Class Two tax rate of 2.3% in 1997.

This year, the tax rate for Class Two properties actually fell a bit (from 11.056 to 11.046). There was less need for the City Council to intervene this year because the value of stabilized buildings and commercial properties is no longer declining.

### Billable Assessments Rose for the First Time in Five Years

(Percent Change in Taxes due to Assessments and Exemptions/Abatements/Tax Rate)



Source: New York City Department of Finance

✓ **Assessments** – The assessed valuations of rent-stabilized buildings rose dramatically from the late 1980's through 1991, increasing 8% or more each year (see chart on previous page). In 1992 and 1993 the increase in valuations 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.

For the first time in five years, assessments have increased. Overall, assessments were up slightly less than 1%. The changes ranged from a drop of 7% in Staten Island (which has less than 200 stabilized buildings) to an increase of 1.4% in Brooklyn. The increase in Manhattan was 1.2%.

Last year there was a sharp drop in assessments in the Bronx. The change this year was milder, but assessments continued to fall - by 0.7%.

✓ **Abatements and Exemptions** – The number of buildings with tax abatements continues to decline. This year, the number of buildings with abatements declined from 9800 to 9600, and the average benefit of the typical abatement fell slightly too.

Many new buildings were constructed during the 1980's, and a good share of these benefitted from tax abatements. These abatements are now expiring. Without a concomitant increase in new abatements (i.e. through new construction) the net impact is to raise taxes for rent stabilized buildings as a whole, by approximately 0.2%.

A reduction in tax exemptions had a greater impact on the real estate tax component of the Price Index than abatements. In the city as a whole, smaller average exemptions (the number of buildings with exemptions actually rose somewhat) added 0.3% to tax bills. Given that exemptions played less of a role than last year, and that a strengthening economy could stimulate real estate investment, expiring exemptions may have less impact next year and in the near future.

✓ **Characteristics of Buildings** – Although taxes in the aggregate for rent stabilized buildings rose only 1.2%, taxes for the typical building rose 2.7%. In other words, half of all buildings had an increase in taxes of 2.7% or more while half had an increase of less than 2.7%.

Small buildings fared far worse than larger buildings. For buildings of less than twenty units, the increase in real estate taxes was 2.9%. The increases for 20-49 unit buildings and buildings with 50 or more units were 1.2% and 0.9% respectively.

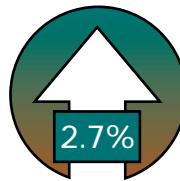
The disparities among building types are even larger when we use assessed value, rather than

number of units, as a measure. We divided all rent stabilized buildings into four quartiles based on their assessed value in FY 1997. The bottom quartile contains the fourth of buildings with the lowest assessed values, while the top quartile contains the fourth of buildings with the highest assessed values.

In the bottom quartile (average assessed value only \$40,000) taxes rose 6.6%. In the second and third quartile taxes rose 3.4% and 1.7% respectively. In the top quartile taxes were up only 0.9%.

Clearly, smaller and less valuable buildings are experiencing tax increases substantially above the average. Although the assessed value "phase in" procedures may be playing a role here (larger buildings benefit from a five-year phase-in of higher assessments), there must be other factors at work too such as the more substantial increases in rent identified in this year's Income and Expense Study.

## Labor



The price index measure of labor costs includes union and non-union salaries and benefits, in addition to changes in Social Security and unemployment insurance. The cost of unionized labor comprises two thirds of the Labor component and

one-tenth of the entire price index.

Increases in labor costs continue to be quite moderate – this year's change of 2.7% is the second lowest since 1976. The rate of increase in the labor component started declining in the mid-eighties and this year's growth rate is less than half that measured ten years ago. The particularly low increase in labor costs reflects both a slowdown in benefit growth after a period of striking increases in the early 1990's and a much lower growth rate for wages reached through union contracts.

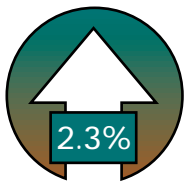
Last year Union Local 32B-32J agreed to contract provisions which would offset wage increases for currently employed workers by lower starting salaries for new employees and part-time help, combined with little or no increase in health care or pension benefits. These contract provisions upset existing PIOC methodology, which had been quite straight forward.

To correctly measure the change in 32B-32J wages, staff designed a "supplemental survey" which was mailed (along with the Owner's survey) to all buildings containing 25 or more units. Of the 36 owners who indicated that Local 32B-32J union labor was employed in their buildings, not a single one hired new janitors or handypersons at the new

(lower) starting wage. Thus, the methodology for computing components 203 and 204 of the PIOC (union labor) remained unchanged this year.

The contract for Union Local 32-E expired in March. If the union and building owners had reached an agreement by April 15th, the terms of this agreement would have been incorporated into this 1998 PIOC. However, since no agreement was reached, the increase for component 201 (Local 32-E wages) was 0%. Any increase reached after April 15th will be reflected in next year's price index, along with increases for 1999.

### Utilities



The utilities component consists primarily of electricity, natural gas, and water & sewer charges. Telephone and steam costs are a small part of the utilities index. In the case of most utility components, changes in price are

measured using the PIOC specifications (i.e. the quantity of electricity, steam etc. being purchased) and the changes in rate schedules. Water/sewer costs are based on billings obtained from the City's Department of Environmental Protection (DEP).

This year, utilities increased 2.3%, led by an increase of 6.5% in water/sewer fees. Most other utility costs showed modest decreases.

Through 1995, Speedwell Inc. was responsible for calculating changes in real estate taxes and water/sewer fees. Speedwell obtained water/sewer billing information on more than 30,000 properties from the Department of Finance's Open Balance Register. Finance was responsible for billing customers even though the water system was operated by DEP. In 1995 responsibility for billing was assumed by DEP, rendering instantly obsolete all of Speedwell's computer programs for calculating the change in water/sewer costs.

Staff has struggled with the water sewer data for three years, trying to adapt previous PIOC methodology to a new set of circumstances. Unfortunately, it has been very difficult to obtain an extract of data which is free of billing errors and which also

accurately reflects the complex programs adopted by DEP (i.e. Metering, the toilet rebate program, etc.).

Given the problems with the water/sewer data, we used a less than optimal measure in the PIOC this year – the 6.5% increase in water/sewer rates. While there is no doubt this is a proper measure of the median increase for rent-stabilized buildings, it is not precisely what the PIOC attempts to measure, which is the aggregate increase (or mean increase) in water/sewer costs. Nevertheless, it is the best measure available and is used in this year's price index.

Natural gas costs decreased this year, by 7%. The PIOC measures gas, like fuel oil, largely on a "cost-weighted" basis which takes both the price and heating degree days into consideration. Gas costs fell due to warmer weather and slightly lower prices.

The price of electricity rose by 1% this year. This small increase is partly due to the traditional method of measuring electricity from April-to-April rather than on a cost-weighted basis. If electricity was measured on a cost-weighted basis, like fuel oil and natural gas, this component would have shown a greater increase.

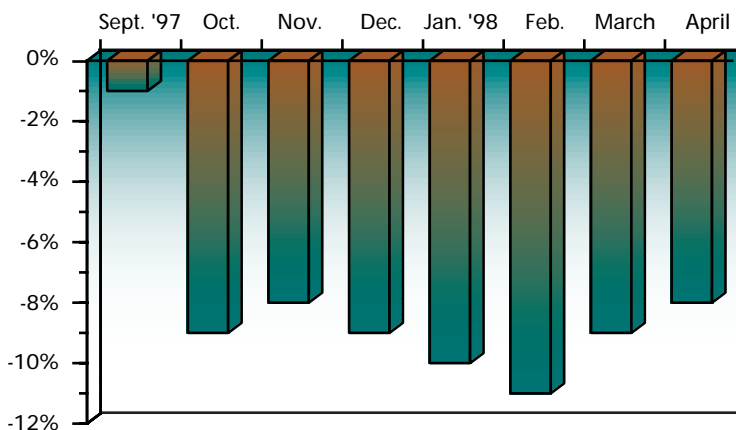
### Fuel



To calculate changes in fuel oil costs staff gathers monthly price data from fuel oil vendors and weights the data using a degree day formula to account for changes in the weather. The number of degree days is a measure of heating requirements.

### Fuel Oil Prices were Lower throughout the Heating Season

(Price of fuel Oil by month, 1997-98, compared to Previous year)

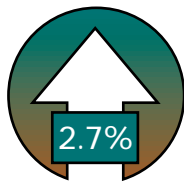


Source: RGB Fuel Vendor Survey. Prices Indices of Operating Costs, 1997 and 1998.

Fuel oil prices plunged 15% this year. The price decreases for #6 fuel oil, #4, and #2 were 16% (#s 4 and 6) and 12% (#2).

The drop in fuel prices was due in part to winter weather which was quite warm and notably free of snow. Since the change in fuel costs is based not on a comparison with “normal” weather conditions but with the year before (which was also warm), the balmy winter was responsible for only about 5% of the drop in heating costs. A drop in the price of fuel was responsible for the remaining 10% decrease in costs.

### Contractor Services



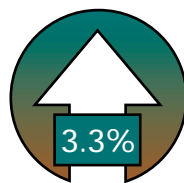
Contractor Services increased 2.7% in 1997. The most important items in this component, repainting and plumbing costs, rose moderately (2.1% and 3.1% respectively). Most of the other components had increases in the

two to five percent range.

Repainting costs, which comprise a whopping 40% of the Contractor Services component, continued a recent trend of low increases, rising only 2.1%, exactly the same as last year. While several painters surveyed this year noted that the price of paint and labor had increased, most maintained prices in order to stay competitive.

This year's increase in contractor costs was affected considerably by a 3.1% increase in plumber's fees, which constitute a fourth of contractor services costs. Elevator maintenance costs, which rose sharply last year, were also up significantly this year (4.4%). It appears that most of the increase was due to a new union contract.

### Administrative Costs



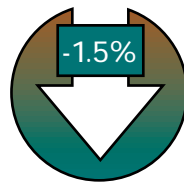
Administrative Costs rose 3.3%, which is slightly lower than last year's increase. Fees paid to management companies, accountants, and attorneys comprise nearly all of this component.

Management company fees comprise the lion's share (two-thirds) of administrative costs. Since management companies tend to increase their fees in tandem with apartment buildings' rental income, it is not surprising that management fees have risen from 3.5% to 4.5% annually in recent years. Similar rates of increase in rental income have been found in RGB staff's Income and Expense Studies.

Accountants raised prices only 1.1% this year, while attorney fees rose by 4.3%.

In last year's PIOC we found that during the last six years, administrators have had higher increases than their counterparts, skilled contractors. This trend has continued for a seventh consecutive year. However, the wide discrepancy in increases seen in some prior years has narrowed to just over one-half percent. While the strong rental market has boosted Administrative Costs, the strengthening economy, which is linked to a greater degree to the wages of skilled contractors, has had less of an impact on the Contractor Services component.

### Insurance

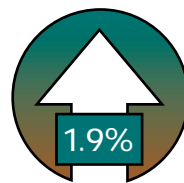


Insurance Costs fell slightly this year (-1.5%), after increases of 5% in both 1995 and 1996 and 2% in 1997. Four hundred buildings supplied the Board with insurance data this year.

About one-fourth of the buildings reported a decline in their insurance costs and well over half indicated no change or a decline. Rate hikes fueled some cost growth, with one-third (138) of this year's respondents claiming higher rates, as opposed to one-sixth (59) that reported rate declines. However, the average rate decline was greater than the average rate increase. More telling perhaps, is that the largest buildings decreased their insurance costs, even before the figures were adjusted for changes in coverage.

Only 14 (4%) of building owners reported that insurers were withdrawing lead paint coverage from their policies, over concern for the potential costs of liability for lead related health problems. This figure was the same as last year. The removal of lead liability coverage does not reduce the cost of insurance. Instead, the total insurance expenses of respondents who had their lead coverage withdrawn rose.

### Parts and Supplies



The overall increase in the Parts and Supplies component was 1.9%. Increases in this component have been fairly consistent and generally very low since the early 1980's. This year is no exception. Price increases ranged from a

high of 5.3% (deck faucet) to a decrease of 6.5% (Pushbroom).

## Replacement Costs



The Replacement Costs item is even less significant than the Parts and Supplies Component, its weight being only 1/100th of the PIOC. This year's increase in the Replacement Costs component was only 0.6%.

## Rent-Stabilized Hotels

The hotel price index methodology was first developed by the consulting firm USR&E based on its 1985 Price Index for Hotels. It includes separate indices for each of the three categories of hotels (due to their dissimilar operating cost profiles) and an index for all hotels.

The price index for all hotels rose 0.6% this year, just slightly more than the increase in the apartment price index. The primary differences between the hotel index and the apartment index were in the taxes and labor components. The increase in taxes for hotels was 3.5% overall (versus 1.2% in apartment buildings) due to a substantial increase in taxes for all types of single room occupancy buildings.

The labor component went up significantly more than in the apartment sector for two reasons - wage increases for hotel workers were somewhat higher than for their counterparts in the apartment sector and the labor component was not affected by the lack of a settlement by Local 32E, as in the apartment sector.

Among the different categories of hotels, the increases were: Hotels 1.3%, Rooming Houses 0.2%, and SROs 0.0%.

## Rent-Stabilized Lofts

The increase in the Loft Index this year was 1.0%, somewhat larger than the increase for apartments. Since fuel costs are a smaller fraction of the total than in apartments, there was less downward pressure on the loft index. In addition, legal costs constitute more than one-tenth of all loft costs. Since legal costs rose some 4.3%, this had a significant impact on the loft index.

## 1998-99 PIOC Projections

Projecting anticipated changes in the PIOC has become more challenging in recent years. One factor alone—the weather, which affects about one sixth of the market basket of operating costs measured in the index has—become increasingly volatile. These unpredictable weather patterns are the force behind large changes in fuel-related costs (heating fuel, electricity and gas), which have in turn hindered the accuracy of the PIOC projections in recent studies. In addition, drastic and somewhat cyclical shifts in local fuel prices often mask smaller changes in non-fuel related costs, obscuring the long term movement of the PIOC.

This year, operating costs in rent-stabilized apartment buildings were nearly flat, increasing by 0.1% versus our projection of 1.8%. In particular, fuel costs decreased much faster than anticipated, -15% versus the expected decrease of -5%. Property taxes, utility, administrative, and insurance costs all

### CHANGE IN COSTS FOR RENT-STABILIZED HOTEL BUILDINGS, APRIL 1997 TO APRIL 1998

Taxes	3.5%
Labor Costs	3.3%
Utilities Costs	0.4%
Fuel Costs	-13.5%
Contractor Services	2.9%
Administrative Costs	3.6%
Insurance Costs	-1.5%
Parts & Supplies	1.4%
Replacement Costs	0.7%
All Costs	0.6%

### CHANGE IN COSTS FOR RENT-STABILIZED LOFT BUILDINGS, APRIL 1997 TO APRIL 1998

Taxes	2.4%
Labor Costs	3.3%
Utilities Costs	2.3%
Fuel Costs	-14.8%
Contractor Services	2.7%
Administrative Costs, Legal	4.3%
Administrative Costs, Other	3.2%
Insurance Costs	-1.5%
Parts & Supplies	1.9%
Replacement Costs	0.6%
All Costs	1.0%



rose less than estimated, while the price of labor and contractor services grew faster than anticipated.

Overall, we expect the PIOC to grow by 3.5% from 1998 to 1999 due to a brisk rise in taxes and fuel costs and moderate increases in labor, utility, contractor services and administrative costs. The "core" PIOC, which measures long term local trends by factoring out shifts in fuel prices, gas, and electricity rates, should rise more slowly than the overall PIOC, by 3.1%, due to relatively rapid increases in taxes, utility and labor costs.

**Taxes +3.5%**

Property taxes comprise roughly a quarter of the PIOC. From the mid 1980's to the early 1990's, taxes often rose faster than the overall PIOC. Recently however, intervention by the City Council in the determination of tax rates has dampened this trend.

Class Two properties include rent stabilized apartments, co-ops and condominiums. Within this category, rent-stabilized dwellings are classified as either "rental buildings" or "4-10 unit family buildings." Based on the preliminary tax roll, the Finance Department forecasts billable assessments (the assessed value of a property on which tax liability is based) for rental buildings to increase by 4.9%, while billables for 4-10 family buildings are expected to increase by 5.3% in 1999. These are the largest projected increases observed since the early 1990's. However, preliminary assessments are slightly imprecise because following the release of the tentative assessment roll each year, a small percentage of appraisals are contested and the overall final assessment is generally reduced. After adjusting for this factor, billable assessments should actually rise by 3.9% and 4.6% respectively for rentals and 4-10 unit properties. In sum, assessments for stabilized buildings, which are predominantly classified as "rental" buildings, should increase by 4% from 1998 to 1999.

Overall, assuming a fairly flat tax rate for Class Two properties combined with declining abatements and exemptions for such properties, should produce roughly 3.5% growth in property tax bills for rent stabilized buildings next year.

**Labor Based Components**

(Labor Costs +2.9%, Administrative Costs +3.6% and Contractor Services +2.6%)

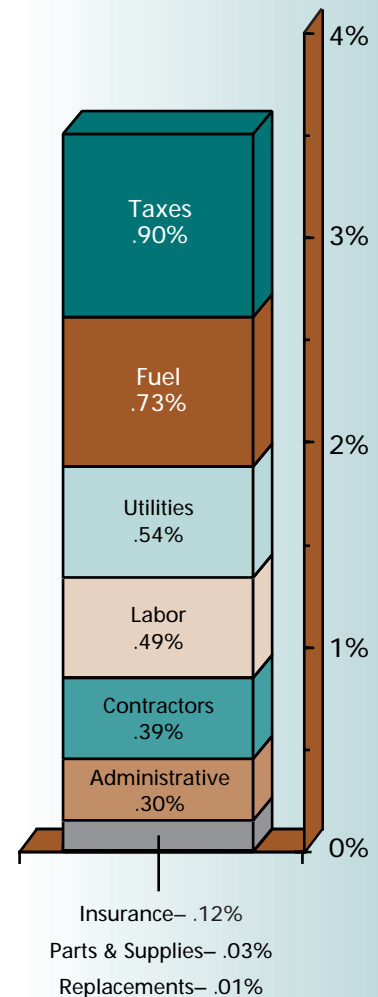
Labor Based Components in the PIOC include "Labor Costs," comprising the wages and benefits of building maintenance workers (e.g. superintendents, porters, etc.), "Contractor Services," which primarily covers the work of plumbers and painters, and "Administrative Costs," which cover management, legal, and accounting fees.

Growth in Laborer's wages and benefits this past year was slight by historical standards, and was the second lowest rate observed since 1976. The signing of a new contract in 1997 with one of the primary unions representing building service workers should further reduce the projected cost of labor. However, additional adjustment is unnecessary as an insignificant number of new employees are expected to be hired under this contract in the coming year.<sup>1</sup>

We expect the trend of low increases to continue next year because the combined effects of stagnant employment prospects in the trade sector, the

**Tax and Fuel Increases Contribute the Most to the 1999 PIOC Projection**

(PIOC Components contribution to Overall Increase)



**Overall 1999 PIOC Projection is:**

**3.5%**

Source: Price Index of Operating Costs, 1998; PIOC projection for 1999

1. This agreement called for all wage increases for currently employed workers to be offset by lower starting salaries for new employees and part-time help, combined with little or no increase in health care or pension benefits.

available supply of skilled and unskilled maintenance workers, and minimal new housing construction will allow the owners of stabilized buildings to offer lower wages and benefits to labor than they had in previous years. Along with growth in non-union wages of 4% and modest growth in benefits, Labor Costs should rise by 2.9%.

Increases in "Administrative Costs" and "Contractor Services" are projected by averaging the growth rates observed in each component over the past three years. Administrative cost increases have been fairly stable over the decade, and should rise by 3.6% over the next year. The price of contractor services has been more variable in the recent past, but should increase by 2.6% next year.

### Fuel +6.9%

The cost of fuel oil depends heavily on volatile weather patterns as well as political and economic variables that cannot be reliably predicted. Given these drawbacks (and barring unforeseen natural or geo-political events), fuel oil prices in New York City should rise 6.9% from their current low levels in the coming year due to a variety of factors. Because mild weather conditions this heating season resulted in stock building, there should be sufficient supply to meet rising world-wide demand for oil. However, calls for cut-backs in production from some oil-producing countries, and increased usage due to an anticipated drop in temperatures next winter should cause the price of fuel to rise in the upcoming year.

The Energy Information Administration (EIA) currently projects that imported oil prices will fall from about \$15.80 per barrel to roughly \$15.40 between the heating season of 1997-98 and the heating season of 1998-99. This forecast is driven by an assumption that the supply of oil, built up after this winter's mild temperatures, will more than meet the increase in demand and will slightly lower heating oil prices. The forecast also assumes that growth in national Gross Domestic Product (GDP) will remain at 2.8% through 1998 before declining to 2.0% in 1999, causing U.S. oil demand to stay relatively constant. Most critically, assuming a "normal" winter, which will be much colder than that experienced this year, the commensurate increase in demand for heating fuels and anticipated production cutbacks will in turn accelerate the cost of fuel oil to building owners.

In sum, based on current EIA forecasts, we predict that while the existing excess of supply is sufficient to meet anticipated demand, increased fuel consumption brought about by "normal" weather conditions should

increase fuel oil costs to owners of stabilized buildings in New York City by 6.9% from 1998 to 1999.

### Insurance Costs +1.8%

Insurance Costs for rent-stabilized buildings decreased slightly last year, after increasing by more than 5% in 1995 and 1996 and by 1.9% in 1997. Based on the latest three-year weighted average, Insurance Costs should rise by 1.8% over the coming year.

### Utility Costs +3.8%

In the PIOC, the price of electricity, natural gas, water and sewer service, purchased steam, and telephone service are grouped as "Utility Costs." Water and sewer costs alone account for nearly 60% of this index, while electricity and gas comprise another 35% of the category.

Next year the overall price of utilities should rise by 3.8%. The bulk of this growth will come from rising water and sewer rates (a 4% increase is proposed for the coming year), combined with a brisk increase in natural gas costs and stable electricity prices, which should increase respectively by 6% and 0.6%.

The New York State Public Service Commission (PSC) estimates that electricity rates will remain relatively stable in the upcoming year. In April, Con Edison's electricity rates, which dropped 2% in January 1998, were reduced by an additional 2% for the largest apartment buildings (using 1500 kw/month). Additionally, the PSC predicts stable or decreasing (1%) fuel adjustment charges (FAC's) over the year. Assuming a return to a "normal" winter, and that fuel prices will behave as predicted, the price of electricity will be stable over the coming year, increasing by only 0.6%.

Natural gas costs should increase next year, due primarily to increased usage from an anticipated return to "normal" colder weather in the winter to come. The current surplus in supply (underground gas storage levels are well above those seen in the previous year because of milder temperatures), and increases in domestic production and Canadian imports are expected to more than meet the projected increase in demand. Brooklyn Union Gas projects a 2.5% rate decrease in June, and Con Edison is predicting a continuation of their rate freeze, although a pending rate case may increase rates for small residential customers and decrease rates for larger multifamily customers. Assuming normal winter conditions, however, which will bring far colder weather than was experienced this year, increased consumption should ultimately produce

an increase in gas costs of 6% in New York City over the next year.

During the past ten years, water and sewer rates have grown the fastest of all the components of the Utility Cost category. After many double digit increases, water and sewer rates were frozen from 1993 to 1995. Rates were unfrozen in 1996, and rose by 4.8% in that year and by 6.5% in 1997 and 1998. An increase of 4% should remain in effect from July 1st throughout the year, given current proposals before the New York City Water Board.

In total, increases in water and sewer charges and natural gas costs, combined with stable electricity rates, should cause Utility Costs to rise by 3.8% in 1998.

### Parts & Supplies +1.4%

Parts and Supplies has usually played a very small role in the PIOC, comprising less than 3% of the index in 1998. Over the last three years, growth in this component has been modest, even though such costs increased faster than projected last year. Based on the latest three-year average, the cost of Parts and Supplies should increase by 1.4%.

### Replacement Costs +0.9%

This component accounted for about 1% of the entire price index in 1998. This past year, Replacement

Costs were stable, increasing by only 0.6%. According to the current three year price trend, Replacement Costs should rise by 0.9% over the next year.

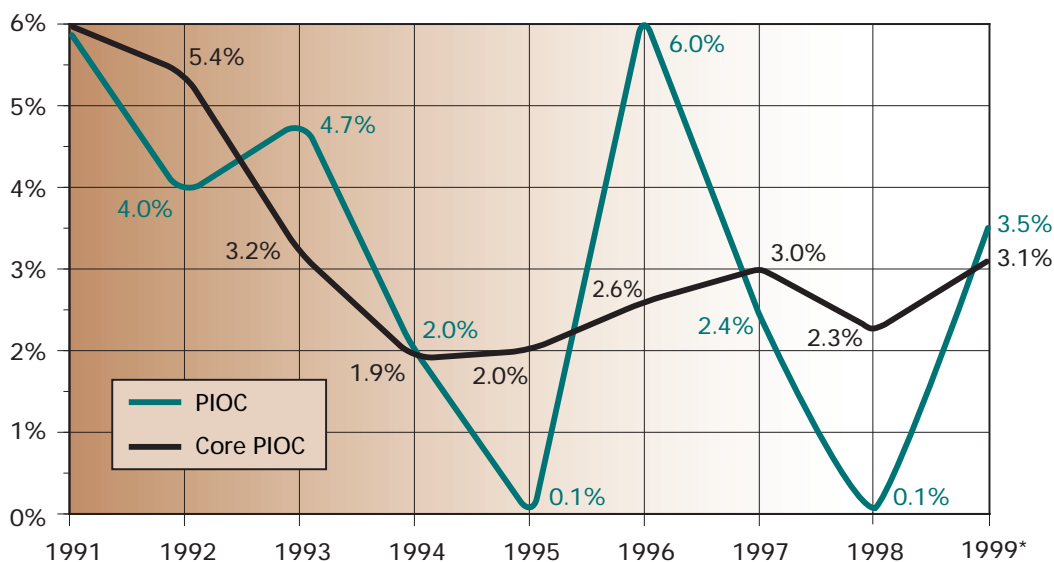
## Commensurate Rent Increase

Throughout its history, the Rent Guidelines Board has used a formula, known as the “commensurate rent increase”, to help determine annual rent increases 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 should rise for net operating income in stabilized buildings to remain constant. The different types of “commensurate” increase described below are primarily meant to provide a foundation, and not a ceiling, for discussion concerning prospective guidelines.

In its simplest form, the commensurate rent increase is the amount of rent growth needed to maintain landlords' current dollar net operating income (NOI) at a constant level. A formula which has been in use since the inception of the Rent Guidelines Board (which we call the “traditional commensurate increase”) yields 0% for a one year lease and 1.1% for a two year lease, given an increase in operating costs of 0.1%, as indicated by the PIOC, and the projection of a 3.5% increase next year.<sup>2</sup>

## The “Core” PIOC Has Fluctuated Little Since 1994

(Percent Change in the Price Index of Operating Costs and the Core PIOC, 1991-1999)



\*Note: The Percent change for 1999 was estimated.

Source: Price Indices of Operating Costs, 1991-1998

As a means of compensating landlords for cost increases, this “traditional” commensurate rent increase 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 two-thirds 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 past O&M increases.

A second flaw of the commensurate formula is that it does not consider the erosion of landlords' income by inflation. By maintaining current dollar net operating income 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 commensurate formula.<sup>3</sup>

Two alternatives to the “traditional” commensurate method have been used by the Rent Guidelines Board. The first, called the “Net Revenue” approach, adjusts for the mix of lease terms. While this takes into consideration the types of leases actually signed by tenants, it does NOT adjust landlords' NOI for inflation. Under the “Net Revenue” formula, a guideline which would preserve NOI in the face of this year's 0.1% increase in PIOC is 0% for a one year lease and 0% for a two year lease.<sup>4</sup>

Another alternative to the traditional commensurate rent increase considers lease terms while adjusting NOI upward to reflect inflation, keeping both O&M and NOI constant. This is commonly called the "CPI Adjusted NOI" formula. A guideline which would preserve NOI in the face of the 1.4% increase in the Consumer Price Index (March '97 to March '98) and the 0.1% rise in the PIOC is 0.5% for a one year lease and 1.5% for a two year lease.<sup>5</sup>

All of these methods have their limitations. The traditional commensurate increase 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 falling, rather than rising over recent years.

Each of these formulae may be best thought of as a starting point for deliberations. Staff's other research (e.g. the mortgage survey and the I&E study) and testimony to the Board can be used to modify the various estimates depending on these other considerations. □

“TRADITIONAL”  
COMMENSURATE INCREASE

<u>1 Year Lease</u>	<u>2 Year Lease</u>
0%	1.1%

“NET REVENUE” INCREASES

<u>1 Year Lease</u>	<u>2 Year Lease</u>
0%	0%

“CPI ADJUSTED NOI”  
INCREASES

<u>1 Year Lease</u>	<u>2 Year Lease</u>
0.5%	1.5%

2. The collectability of legally authorized increases is assumed. Calculating the “traditional” Commensurate Rent Increase requires an assumption about next year's PIOC. In this case we use 3.5%, staff's projection for 1999.

3. Whether profits will actually decline depends on the level of inflation, the composition of net operating income (i.e. how much is debt service and how much is profit), changes in tax laws, and interest rates.

4. Under this formula there is no increase in revenue required, since there was no increase in costs. Thus, the increase for both a one- and two- year lease are set at 0%.

5. The following assumptions were used: (1) The required increase in landlord revenue is the sum of the increase due to increased costs and the impact of inflation on net operating costs. The increase in revenue due to costs is 66.9% of the 1998 PIOC increase of 0.1%, or 0.07%. The 66.9% figure is the most recent ratio of average audited operating costs to average rents in stabilized buildings. The increase in revenue due to the impact of inflation on net operating income is 33.1% times the latest 12-month increase in the CPI (1.4%) or .46%. Thus, the total increase in landlord income required is 0.53%. (2) Assumptions regarding lease renewals were derived from the 1996 Housing and Vacancy Survey. These terms are only illustrative. Other combinations of terms could produce the 0.53% increase in landlord revenue.

## Appendix

### I. PIOC Sample, Number of Price Quotes per Item, 1997 vs. 1998

Spec	Description	1997	1998	Spec	Description	1997	1998
211	Apartment Value	98	112	701	INSURANCE COSTS	421	400
212	Non-Union Super	75	63				
216	Non-Union Janitor/Porter	41	48	801	Light bulbs	7	5
	LABOR COST	214	223	802	Light Switch	8	5
301	Fuel Oil #2	32	33	803	Wet Mop	6	5
302	Fuel Oil #4	9	10	804	Floor Wax	9	5
303	Fuel Oil #6	7	8	805	Paint	12	12
	FUEL COSTS	48	51	806	Pushbroom	6	5
501	Repainting	127	110	807	Detergent	8	5
502	Plumbing, Faucet	33	32	808	Bucket	12	14
503	Plumbing, Stoppage	32	33	809	Washers	10	13
504	Elevator #1	10	12	810	Linens	11	10
505	Elevator #2	10	12	811	Pine Disinfectant	7	5
506	Elevator #3	10	11	812	Window/Glass Cleaner	7	5
507	Burner Repair	10	12	813	Switch Plate	8	6
508	Boiler Repair, Tube	10	12	814	Duplex Receptacle	8	6
509	Boiler Repair, Weld	6	7	815	Toilet Seat	11	12
510	Refrigerator Repair	6	6	816	Deck Faucet	10	12
511	Range Repair	10	11		PARTS & SUPPLIES	140	125
512	Roof Repair	22	22	901	Refrigerator #1	10	10
513	Air Conditioner Repair	6	5	902	Refrigerator #2	10	10
514	Floor Maint. #1	10	8	903	Air Conditioner #1	5	5
515	Floor Maint. #2	10	8	904	Air Conditioner #2	5	5
516	Floor Maint. #3	10	8	905	Floor Runner	8	8
518	Linen/Laundry Service	6	5	906	Dishwasher	5	6
	CONTRACTOR SERVICES	328	314	907	Range #1	5	5
601	Management Fees	55	60	908	Range #2	5	6
602	Accountant Fees	28	29	909	Carpet	10	12
603	Attorney Fees	21	21	910	Dresser	5	5
604	Newspaper Ads	19	18	911	Mattress & Box Spring	7	6
605	Agency Fees	5	5		REPLACEMENT COSTS	75	78
606	Lease Forms	7	10				
607	Bill Envelopes	10	11				
608	Ledger Paper	6	9				
	ADMINISTRATIVE COSTS	151	163		All Items	1377	1354

## II. Expenditure Weights, Price Relatives, Percent Changes and Standard Errors, All Apartments, 1998

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>0.2553</b>	<b>1.0123</b>	<b>1.23%</b>	<b>0.4926</b>	601	Management Fees	0.6788	1.0369	3.69%	0.9748
201	Payroll, Bronx, All	0.1245	1.0000	0.00%	0.0000	602	Accountant Fees	0.1445	1.0111	1.11%	0.4308
202	Payroll, Other, Union, Supts.	0.1180	1.0276	2.76%	0.0000	603	Attorney Fees	0.1363	1.0430	4.30%	1.3587
203	Payroll, Other, Union, Other	0.2902	1.0290	2.90%	0.0000	604	Newspaper Ads	0.0043	1.0561	5.61%	2.4458
204	Payroll, Other, Non-Union, All	0.2692	1.0403	4.03%	1.4249	605	Agency Fees	0.0055	1.0291	2.91%	0.7393
205	Social Security Insurance	0.0475	1.0210	2.10%	0.0000	606	Lease Forms	0.0104	1.0034	0.34%	0.3522
206	Unemployment Insurance	0.0091	0.9337	-6.63%	0.0000	607	Bill Envelopes	0.0105	1.0081	0.81%	0.7322
207	Private Health & Welfare	0.1416	1.0283	2.83%	0.0000	608	Ledger Paper	0.0097	0.9906	-0.94%	1.1221
	LABOR COSTS	<b>0.1663</b>	<b>1.0269</b>	<b>2.69%</b>	<b>0.3836</b>		ADMINISTRATIVE COSTS	<b>0.0834</b>	<b>1.0329</b>	<b>3.29%</b>	<b>0.6902</b>
301	Fuel Oil #2	0.2592	0.8764	-12.36%	0.7309	701	INSURANCE COSTS	<b>0.0654</b>	<b>0.9848</b>	<b>-1.52%</b>	<b>2.4035</b>
302	Fuel Oil #4	0.2162	0.8389	-16.11%	1.5303	801	Light Bulbs	0.0391	1.0054	0.54%	4.7395
303	Fuel Oil #6	0.5246	0.8412	-15.88%	0.8292	802	Light Switch	0.0477	1.0415	4.15%	3.6469
	FUEL	<b>0.1059</b>	<b>0.8498</b>	<b>-15.02%</b>	<b>0.5784</b>	803	Wet Mop	0.0425	1.0061	0.61%	2.6964
401	Electricity #1, 2,500 KWH	0.0135	0.9993	-0.07%	0.0000	804	Floor Wax	0.0401	1.0334	3.34%	0.0000
402	Electricity #2, 15,000 KWH	0.1664	1.0118	1.18%	0.0000	805	Paint	0.2127	1.0300	3.00%	1.7121
403	Electricity #3, 82,000 KWH	0.0000	1.0115	1.15%	0.0000	806	Pushbroom	0.0401	0.9341	-6.59%	6.6456
404	Gas #1, 12,000 therms	0.0051	1.0020	0.20%	0.0000	807	Detergent	0.0343	1.0000	0.00%	0.0000
405	Gas #2, 65,000 therms	0.0603	0.9267	-7.33%	0.0000	808	Bucket	0.0423	1.0335	3.35%	2.2208
406	Gas #3, 214,000 therms	0.1526	0.9287	-7.13%	0.0000	809	Washers	0.1032	1.0074	0.74%	0.7625
407	Steam #1, 1.2m lbs	0.0163	0.9804	-1.96%	0.0000	811	Pine Disinfectant	0.0502	1.0000	0.00%	0.0000
408	Steam #2, 2.6m lbs	0.0061	0.9762	-2.38%	0.0000	812	Window/Glass Cleaner	0.0528	1.0221	2.21%	0.0000
409	Telephone	0.0120	1.0240	2.40%	0.0000	813	Switch Plate	0.0426	1.0210	2.10%	2.0139
410	Water & Sewer	0.5676	1.0650	6.50%	0.0000	814	Duplex Receptacle	0.0356	1.0000	0.00%	0.0000
	UTILITIES	<b>0.1441</b>	<b>1.0234</b>	<b>2.34%</b>	<b>0.0000</b>	815	Toilet Seat	0.1016	1.0141	1.41%	1.5264
501	Repainting	0.4066	1.0208	2.08%	0.9760	816	Deck Faucet	0.1151	1.0533	5.33%	2.9526
502	Plumbing, Faucet	0.1387	1.0309	3.09%	1.1855		PARTS AND SUPPLIES	<b>0.0225</b>	<b>1.0193</b>	<b>1.93%</b>	<b>0.6659</b>
503	Plumbing, Stoppage	0.1236	1.0307	3.07%	1.5653	901	Refrigerator #1	0.0911	0.9877	-1.23%	1.2428
504	Elevator #1, 6 fl., 1 e.	0.0541	1.0430	4.30%	1.6753	902	Refrigerator #2	0.4779	1.0000	0.00%	0.0000
505	Elevator #2, 13 fl., 2 e.	0.0367	1.0394	3.94%	1.3700	903	Air Conditioner #1	0.0175	0.9961	-0.39%	1.9858
506	Elevator #3, 19 fl., 3 e.	0.0208	1.0534	5.34%	1.4644	904	Air Conditioner #2	0.0219	1.0144	1.44%	0.6858
507	Burner Repair	0.0384	1.0366	3.66%	1.2562	905	Floor Runner	0.0860	1.0071	0.71%	0.7723
508	Boiler Repair, Tube	0.0464	1.0255	2.55%	1.3699	906	Dishwasher	0.0451	1.0375	3.75%	2.4785
509	Boiler Repair, Weld	0.0355	1.0137	1.37%	0.9283	907	Range #1	0.0432	1.0481	4.81%	2.5536
510	Refrigerator Repair	0.0137	1.0029	0.29%	0.3015	908	Range #2	0.2173	1.0131	1.31%	0.8485
511	Range Repair	0.0143	1.0224	2.24%	1.9949		REPLACEMENT COSTS	<b>0.0098</b>	<b>1.0064</b>	<b>0.64%</b>	<b>0.2781</b>
512	Roof Repair	0.0555	1.0316	3.16%	1.4585		ALL ITEMS	<b>1.0000</b>	<b>1.0013</b>	<b>0.13%</b>	<b>0.2393</b>
513	Air Conditioner Repair	0.0097	0.9800	-2.00%	0.0000						
514	Floor Maint. #1, Studio	0.0003	1.0396	3.96%	2.8912						
515	Floor Maint. #2, 1 Br.	0.0006	1.0406	4.06%	2.9681						
516	Floor Maint. #3, 2 Br.	0.0050	1.0385	3.85%	2.8195						
	CONTRACTOR SERVICES	<b>0.1474</b>	<b>1.0267</b>	<b>2.67%</b>	<b>0.4987</b>						

### III. Price Relatives by Building Type, Apartments, 1998

Spec #	Item Description	Pre-1947	Post-1946	Gas Heated	OIL Heated	MASTER METERED BLDGS	Spec #	Item Description	Pre-1947	Post-1947	Gas Heated	Oil Heated	MASTER METERED BLDGS
101	TAXES, FEES, & PERMITS	<b>1.0123</b>	<b>1.0123</b>	<b>1.0123</b>	<b>1.0123</b>	<b>1.0123</b>	601	Management Fees	0.6267	0.8003	0.6543	0.7092	0.4735
201	Payroll,Bronx,All	0.1708	0.0714	0.0020	0.1507	0.0000	602	Accountant Fees	0.1719	0.1138	0.1036	0.1558	0.3515
202	Payroll,Other,Union,Supts.	0.1232	0.1190	0.1487	0.1098	0.0939	603	Attorney Fees	0.1774	0.0983	0.2387	0.1260	0.1439
203	Payroll,Other,Union,Other	0.1791	0.4350	0.3494	0.2821	0.3799	604	Newspaper Ads	0.0055	0.0032	0.0076	0.0041	0.0045
204	Payroll,Other,Non-Union,All	0.3774	0.1689	0.3447	0.2804	0.4071	605	Agency Fees	0.0069	0.0040	0.0094	0.0051	0.0056
205	Social Security Insurance	0.0443	0.0533	0.0523	0.0475	0.0457	606	Lease Forms	0.0148	0.0049	0.0072	0.0110	0.0163
206	Unemployment Insurance	0.0082	0.0089	0.0091	0.0087	0.0114	607	Bill Envelopes	0.0151	0.0050	0.0074	0.0112	0.0167
207	Private Health & Welfare	0.1236	0.1707	0.1248	0.1470	0.0937	608	Ledger Paper	0.0137	0.0045	0.0067	0.0101	0.0151
	LABOR COSTS	<b>1.0267</b>	<b>1.0271</b>	<b>1.0310</b>	<b>1.0261</b>	<b>1.0317</b>		ADMINISTRATIVE COSTS	<b>1.0320</b>	<b>1.0341</b>	<b>1.0350</b>	<b>1.0325</b>	<b>1.0271</b>
301	Fuel Oil #2	0.2755	0.0816	0.0056	0.2264	0.3409	701	INSURANCE COSTS	<b>0.9848</b>	<b>0.9848</b>	<b>0.9848</b>	<b>0.9848</b>	<b>0.9848</b>
302	Fuel Oil #4	0.2170	0.0738	0.1298	0.1784	0.1342	801	Light Bulbs	0.0384	0.0411	0.0402	0.0390	0.0755
303	Fuel Oil #6	0.3592	0.6889	0.7057	0.4450	0.3794	802	Light Switch	0.0486	0.0519	0.0508	0.0493	0.0956
	FUEL	<b>0.8517</b>	<b>0.8443</b>	<b>0.8411</b>	<b>0.8498</b>	<b>0.8545</b>	803	Wet Mop	0.0404	0.0483	0.0344	0.0471	0.0554
401	Electricity #1, 2,500 KWH	0.0200	0.0009	0.0223	0.0107	0.0000	804	Floor Wax	0.0391	0.0467	0.0332	0.0454	0.0535
402	Electricity #2, 15,000 KWH	0.1360	0.2316	0.0747	0.2115	0.0000	805	Paint	0.2213	0.2143	0.2483	0.2108	0.1133
403	Electricity #3, 82,000 KWH	0.0000	0.0000	0.0000	0.0000	0.5166	806	Pushbroom	0.0373	0.0379	0.0269	0.0368	0.0433
404	Gas #1, 12,000 therms	0.0072	0.0010	0.0043	0.0057	0.0002	807	Detergent	0.0323	0.0387	0.0275	0.0376	0.0443
405	Gas #2, 65,000 therms	0.0695	0.0294	0.1338	0.0313	0.0153	808	Bucket	0.0412	0.0493	0.0350	0.0478	0.0564
406	Gas #3, 214,000 therms	0.1303	0.1639	0.4015	0.0353	0.0503	809	Washers	0.1091	0.0926	0.1123	0.0998	0.0558
407	Steam #1, 1.2m lbs	0.0001	0.0470	0.0012	0.0001	0.0000	811	Pine Disinfectant	0.0492	0.0526	0.0514	0.0499	0.0968
408	Steam #2, 2.6m lbs	0.0001	0.0175	0.0004	0.0001	0.0000	812	Pine Disinfectant	0.0492	0.0526	0.0514	0.0499	0.0968
409	Telephone	0.0136	0.0097	0.0077	0.0146	0.0160	812	Window/Glass Cleaner	0.0528	0.0565	0.0552	0.0535	0.1039
410	Water & Sewer	0.6493	0.5171	0.3342	0.7332	0.4289	813	Switch Plate	0.0410	0.0490	0.0349	0.0476	0.0562
	UTILITIES	<b>1.0260</b>	<b>1.0182</b>	<b>0.9800</b>	<b>1.0424</b>	<b>1.0274</b>	814	Duplex Receptacle	0.0336	0.0401	0.0285	0.0391	0.0460
501	Repainting	0.3962	0.4664	0.5466	0.3827	0.3618	815	Toilet Seat	0.1080	0.0918	0.1113	0.0989	0.0553
502	Plumbing, Faucet	0.1652	0.0826	0.1383	0.1401	0.1565	816	Deck Faucet	0.1271	0.1081	0.1310	0.1164	0.0650
503	Plumbing, Stoppage	0.1467	0.0746	0.1251	0.1267	0.1415		PARTS AND SUPPLIES	<b>1.0195</b>	<b>1.0189</b>	<b>1.0209</b>	<b>1.0192</b>	<b>1.0162</b>
504	Elevator #1, 6 fl., 1 e.	0.0703	0.0186	0.0230	0.0630	0.0009	901	Refrigerator #1	0.0868	0.0974	0.0732	0.0977	0.0793
505	Elevator #2, 13 fl., 2 e.	0.0193	0.0898	0.0054	0.0481	0.1051	902	Refrigerator #2	0.4714	0.4931	0.3973	0.4946	0.4016
506	Elevator #3, 19 fl., 3 e.	0.0075	0.0614	0.0453	0.0179	0.0375	903	Air Conditioner #1	0.0092	0.0367	0.0236	0.0154	0.0110
507	Burner Repair	0.0403	0.0386	0.0201	0.0465	0.0353	904	Air Conditioner #2	0.0117	0.0465	0.0299	0.0196	0.0140
508	Boiler Repair,Tube	0.0481	0.0461	0.0241	0.0556	0.0423	905	Floor Runner	0.0818	0.0975	0.0459	0.0978	0.2332
509	Boiler Repair,Weld	0.0365	0.0349	0.0182	0.0421	0.0320	906	Dishwasher	0.0403	0.0619	0.1476	0.0226	0.0137
510	Refrigerator Repair	0.0134	0.0147	0.0131	0.0139	0.0074	907	Range #1	0.0515	0.0307	0.0494	0.0460	0.0452
511	Range Repair	0.0142	0.0156	0.0140	0.0148	0.0079	908	Range #2	0.2540	0.1416	0.2436	0.2117	0.2080
512	Roof Repair	0.0619	0.0446	0.0403	0.0629	0.0460		REPLACEMENT COSTS	<b>1.0067</b>	<b>1.0055</b>	<b>1.0105</b>	<b>1.0054</b>	<b>1.0061</b>
513	Air Conditioner Repair	0.0026	0.0285	0.0040	0.0065	0.0334		CONTRACTOR SERVICES	<b>1.0269</b>	<b>1.0260</b>	<b>1.0258</b>	<b>1.0271</b>	<b>1.0266</b>
514	Floor Maint. #1, Studio	0.0002	0.0005	0.0004	0.0004	0.0006		ALL ITEMS	<b>0.9947</b>	<b>1.0052</b>	<b>1.0069</b>	<b>0.9961</b>	<b>1.0026</b>
515	Floor Maint. #2, 1 Br.	0.0005	0.0008	0.0008	0.0006	0.0093							
516	Floor Maint. #3, 2 Br.	0.0041	0.0084	0.0071	0.0054	0.0089							

## IV. Percentage Change in Real Estate Tax Sample by Borough and Source of Change, Apartments and Hotels, 1998

	% Change Due to Assessments	% Change Due to Exemptions	% Change Due to Abatements	% Change Due to Tax Rate	% Change Due to Interactions	Total % Change
<b>APARTMENTS</b>						
Manhattan	1.19%	0.47%	0.09%	-0.12%	0.00%	1.63%
Bronx	-0.72%	0.25%	0.09%	-0.10%	0.00%	-0.48%
Brooklyn	1.40%	0.09%	0.44%	-0.10%	0.00%	1.83%
Queens	0.16%	-0.02%	0.18%	-0.10%	0.00%	0.22%
Staten Island	-6.95%	4.40%	0.14%	-0.10%	0.00%	-2.79%
<b>Total</b>	<b>0.85%</b>	<b>0.34%</b>	<b>0.15%</b>	<b>-0.11%</b>	<b>0.00%</b>	<b>1.23%</b>
<b>HOTELS</b>						
Hotels	5.42%	-0.17%	-0.13%	-0.75%	-0.04%	4.33%
Rooming Houses	3.09%	0.00%	0.00%	-0.18%	0.00%	2.91%
SROs	3.43%	0.82%	-0.91%	-0.36%	-0.02%	2.96%
<b>Total</b>	<b>4.15%</b>	<b>0.29%</b>	<b>-0.45%</b>	<b>-0.48%</b>	<b>-0.02%</b>	<b>3.49%</b>

Note: Totals may not add due to rounding.

## V. Tax Change by Borough and Community Board, Apartments, 1998

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>All</b>	<b>13,039</b>	<b>1.63</b>		10	172	0.0	(Queens cont.)	1	1,782	3.0
	1	33	NA		11	284	0.5		2	832	3.0
	2	1,236	2.0		12	379	3.0		3	403	0.9
	3	1,490	0.8	Brooklyn	<b>All</b>	<b>11,787</b>	<b>1.83</b>		4	350	-2.0
	4	1,082	2.0		1	1,430	0.4		5	1,137	3.4
	5	338	3.0		2	686	2.0		6	338	-1.0
	6	976	0.3		3	586	6.0		7	440	0.5
	7	2,280	2.0		4	1,206	7.0		8	196	-1.0
	8	2,384	2.0		5	264	6.0		9	196	0.6
	9	703	1.0		6	972	4.0		10	81	0.8
	10	655	-7.0		7	850	5.0		11	133	0.4
	11	496	-1.0		8	820	-4.0		12	143	0.7
	12	1,366	1.0		9	523	2.0		13	47	-2.0
			10		840	3.0		14	84	-3.0	
Bronx	<b>All</b>	<b>4,402</b>	<b>-0.48</b>		11	737	4.0	Staten Island	<b>All</b>	<b>174</b>	<b>-2.79</b>
	1	232	-19.0	12	613	2.0		1	111	-3.0	
	2	147	-2.0	13	189	-3.0		2	39	-3.0	
	3	180	1.0	14	861	1.0		3	24	-2.0	
	4	602	-2.0	15	386	1.0	No Com. Board Listed	NA	673	NA	
	5	562	1.0	16	193	9.0					
	6	355	1.0	17	563	3.0					
	7	881	-1.0	18	68	-1.0					
	8	336	-1.0	Queens	<b>All</b>	<b>6,162</b>	<b>0.22</b>	Citywide	<b>All</b>	<b>36,237</b>	<b>1.23</b>
	9	272	0.0								



## VI. Expenditure Weights, Price Relatives, Percent Changes and Standard Errors, All Hotels, 1998

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>0.2213</b>	<b>1.0349</b>	<b>3.49%</b>	<b>2.9457</b>	601	Management Fees	0.6118	1.0369	3.69%	0.9748
205	Social Security Insurance	0.0591	1.0210	2.10%	0.0000	602	Accountant Fees	0.0838	1.0111	1.11%	0.4308
206	Unemployment Insurance	0.0201	0.9337	-6.63%	0.0000	603	Attorney Fees	0.1421	1.0430	4.30%	1.3587
208	Hotel Private Health/Welfare	0.0364	1.0244	2.44%	0.0000	604	Newspaper Ads	0.1012	1.0561	5.61%	2.4458
209	Hotel Union Labor	0.3329	1.0304	3.04%	0.0000	605	Agency Fees	0.0242	1.0291	2.91%	0.7393
210	SRO Union Labor	0.0130	1.0277	2.77%	0.0000	606	Lease Forms	0.0117	1.0034	0.34%	0.3522
211	Apartment Value	0.1160	1.0394	3.94%	0.5276	607	Bill Envelopes	0.0142	1.0081	0.81%	0.7322
212	Non-Union Superintendent	0.2993	1.0409	4.09%	2.2663	608	Ledger Paper	0.0110	0.9906	-0.94%	1.1221
213	Non-Union Maid	0.0000	0.0000	NA	0.0000		ADMINISTRATIVE COSTS	<b>0.0941</b>	<b>1.0361</b>	<b>3.61%</b>	<b>0.6753</b>
214	Non-Union Desk Clerk	0.0000	0.0000	NA	0.0000						
215	Non-Union Maintenance Worker	0.0000	0.0000	NA	0.0000	701	INSURANCE COSTS	<b>0.0369</b>	<b>0.9848</b>	<b>-1.52%</b>	<b>2.4035</b>
216	Non-Union Janitor/Porter	0.1232	1.0393	3.93%	0.8253						
	LABOR COSTS	<b>0.1838</b>	<b>1.0329</b>	<b>3.29%</b>	<b>0.6885</b>	801	Light Bulbs	0.0162	1.0054	0.54%	4.7395
301	Fuel Oil #2	0.6912	0.8764	-12.36%	0.7309	802	Light Switch	0.0181	1.0415	4.15%	3.6469
302	Fuel Oil #4	0.0149	0.8389	-16.11%	1.5303	803	Wet Mop	0.0505	1.0061	0.61%	2.6964
303	Fuel Oil #6	0.2939	0.8412	-15.88%	0.8292	804	Floor Wax	0.0501	1.0334	3.34%	0.0000
	FUEL	<b>0.1101</b>	<b>0.8655</b>	<b>-13.45%</b>	<b>0.5614</b>	805	Paint	0.1175	1.0300	3.00%	1.7121
401	Electricity #1, 2,500 KWH	0.0800	0.9993	-0.07%	0.0000	806	Pushbroom	0.0458	0.9341	-6.59%	6.6456
402	Electricity #2, 15,000 KWH	0.0833	1.0118	1.18%	0.0000	807	Detergent	0.0461	1.0000	0.00%	0.0000
403	Electricity #3, 82,000 KWH	0.2585	1.0115	1.15%	0.0000	808	Bucket	0.0519	1.0335	3.35%	2.2208
404	Gas #1, 12,000 therms	0.0469	1.0020	0.20%	0.0000	809	Washers	0.0519	1.0074	0.74%	0.7625
405	Gas #2, 65,000 therms	0.0390	0.9267	-7.33%	0.0000	810	Linens	0.3090	1.0096	0.96%	0.7908
406	Gas #3, 214,000 therms	0.1599	0.9287	-7.13%	0.0000	811	Pine Disinfectant	0.0197	1.0000	0.00%	0.0000
407	Steam #1, 1.2m lbs	0.0002	0.9804	-1.96%	0.0000	812	Window/Glass Cleaner	0.0205	1.0221	2.21%	0.0000
409	Telephone	0.1839	1.0240	2.40%	0.0000	813	Switch Plate	0.0507	1.0210	2.10%	2.0139
410	Water & Sewer	0.1484	1.0650	6.50%	0.0000	814	Duplex Receptacle	0.0431	1.0000	0.00%	0.0000
	UTILITIES	<b>0.1671</b>	<b>1.0038</b>	<b>0.38%</b>	<b>0.0000</b>	815	Toilet Seat	0.0510	1.0141	1.41%	1.5264
501	Repainting	0.2046	1.0208	2.08%	0.9760	816	Deck Faucet	0.0578	1.0533	5.33%	2.9526
502	Plumbing, Faucet	0.0793	1.0309	3.09%	1.1855		PARTS AND SUPPLIES	<b>0.0603</b>	<b>1.0137</b>	<b>1.37%</b>	<b>0.5313</b>
503	Plumbing, Stoppage	0.0748	1.0307	3.07%	1.5653	901	Refrigerator #1	0.0197	0.9877	-1.23%	1.2428
504	Elevator #1, 6 fl., 1 e.	0.0335	1.0430	4.30%	1.6753	902	Refrigerator #2	0.1024	1.0000	0.00%	0.0000
505	Elevator #2, 13 fl., 2 e.	0.0313	1.0394	3.94%	1.3700	903	Air Conditioner #1	0.0629	0.9961	-0.39%	1.9858
506	Elevator #3, 19 fl., 3 e.	0.0291	1.0534	5.34%	1.4644	904	Air Conditioner #2	0.0745	1.0144	1.44%	0.6858
507	Burner Repair	0.0254	1.0366	3.66%	1.2562	907	Range #1	0.0082	1.0481	4.81%	2.5536
508	Boiler Repair, Tube	0.0276	1.0255	2.55%	1.3699	908	Range #2	0.0423	1.0131	1.31%	0.8485
509	Boiler Repair, Weld	0.0250	1.0137	1.37%	0.3015	909	Carpet	0.3394	1.0114	1.14%	1.1668
511	Range Repair	0.1514	1.0224	2.24%	1.9949	910	Dresser	0.1772	1.0152	1.52%	1.8470
512	Roof Repair	0.0226	1.0316	3.16%	1.4585	911	Mattress & Box Spring	0.1735	0.9958	-0.42%	0.4834
513	Air Conditioner Repair	0.0453	0.9800	-2.00%	0.0000		REPLACEMENT COSTS	<b>0.0253</b>	<b>1.0074</b>	<b>0.74%</b>	<b>0.5399</b>
514	Floor Maint. #1, Studio	0.0009	1.0396	3.96%	2.8912						
515	Floor Maint. #2, 1 Br.	0.0019	1.0406	4.06%	2.9681						
516	Floor Maint. #3, 2 Br.	0.0173	1.0385	3.85%	2.8195						
518	Linen/Laundry Service	0.2300	1.0436	4.36%	4.0662						
	CONTRACTOR SERVICES	<b>0.1012</b>	<b>1.0292</b>	<b>2.92%</b>	<b>1.0207</b>		ALL ITEMS	<b>1.0000</b>	<b>1.0064</b>	<b>0.64%</b>	<b>0.6846</b>

VII. Price Relative by Hotel Type, 1998

Spec #	Item Description	Hotel	RH	SRO	Spec #	Item Description	Hotel	RH	SRO
101	TAXES, FEES, & PERMITS	<b>1.0433</b>	<b>1.0291</b>	<b>1.0296</b>	601	Management Fees	0.6822	0.4906	0.5809
205	Social Security Insurance	0.0766	0.0571	0.0355	602	Accountant Fees	0.0556	0.1815	0.1097
206	Unemployment Insurance	0.0172	0.0142	0.0265	603	Attorney Fees	0.1151	0.2092	0.2135
208	Hotel Private Health/Welfare	0.0552	0.0000	0.0052	604	Newspaper Ads	0.1311	0.0528	0.0663
209	Hotel Union Labor	0.5220	0.0000	0.0000	605	Agency Fees	0.0213	0.0394	0.0259
210	SRO Union Labor	0.0000	0.0000	0.0657	606	Lease Forms	0.0101	0.0186	0.0123
211	Apartment Value	0.0337	0.4240	0.1789	607	Bill Envelopes	0.0123	0.0227	0.0150
212	Non-Union Superintendent	0.1050	0.4274	0.5558	608	Ledger Paper	0.0094	0.0173	0.0114
213	Non-Union Maid	0.0000	0.0000	0.0000		ADMINISTRATIVE COSTS	<b>1.0373</b>	<b>1.0321</b>	<b>1.0350</b>
214	Non-Union Desk Clerk	0.0000	0.0000	0.0000					
215	Non-Union Maintenance Worker	0.0000	0.0000	0.0000	701	INSURANCE COSTS	<b>0.9848</b>	<b>0.9848</b>	<b>0.9848</b>
216	Non-Union Janitor/Porter	0.2212	0.1147	0.1680					
	LABOR COSTS	<b>1.0308</b>	<b>1.0374</b>	<b>1.0357</b>	801	Light Bulbs	0.0055	0.0386	0.0319
301	Fuel Oil #2	0.6463	0.8764	0.2601	802	Light Switch	0.0063	0.0445	0.0368
302	Fuel Oil #4	0.0000	0.0000	0.0716	803	Wet Mop	0.0664	0.0238	0.0244
303	Fuel Oil #6	0.2209	0.0000	0.5198	804	Floor Wax	0.0677	0.0243	0.0248
	FUEL	<b>0.8671</b>	<b>0.8764</b>	<b>0.8515</b>	805	Paint	0.0550	0.3186	0.1698
401	Electricity #1, 2,500 KWH	0.0035	0.4461	0.0676	806	Pushbroom	0.0560	0.0200	0.0205
402	Electricity #2, 15,000 KWH	0.0842	0.0000	0.1428	807	Detergent	0.0603	0.0216	0.0221
403	Electricity #3, 82,000 KWH	0.3345	0.0000	0.2056	808	Bucket	0.0701	0.0251	0.0257
404	Gas #1, 12,000 therms	0.0035	0.2963	0.0111	809	Washers	0.0147	0.0863	0.1393
405	Gas #2, 65,000 therms	0.0293	0.0000	0.0834	810	Linens	0.4384	0.0913	0.0996
406	Gas #3, 214,000 therms	0.1538	0.0000	0.2343	811	Pine Disinfectant	0.0066	0.0468	0.0387
407	Steam #1, 1.2m lbs	0.0000	0.0019	0.0000	812	Window/Glass Cleaner	0.0070	0.0496	0.0410
409	Telephone	0.2551	0.0295	0.0816	813	Switch Plate	0.0677	0.0242	0.0248
410	Water & Sewer	0.1414	0.2418	0.1650	814	Duplex Receptacle	0.0563	0.0202	0.0207
	UTILITIES	<b>1.0053</b>	<b>1.0157</b>	<b>0.9914</b>	815	Toilet Seat	0.0145	0.0854	0.1378
501	Repainting	0.2145	0.2439	0.1656	816	Deck Faucet	0.0171	0.1006	0.1625
502	Plumbing, Faucet	0.0328	0.1895	0.1556		PARTS AND SUPPLIES	<b>1.0097</b>	<b>1.0209</b>	<b>1.0204</b>
503	Plumbing, Stoppage	0.0309	0.1787	0.1503	901	Refrigerator #1	0.0084	0.0427	0.0386
504	Elevator #1, 6 fl., 1 e.	0.0486	0.0000	0.0165	902	Refrigerator #2	0.0444	0.2248	0.2036
505	Elevator #2, 13 fl., 2 e.	0.0454	0.0000	0.0153	903	Air Conditioner #1	0.0930	0.0114	0.0000
506	Elevator #3, 19 fl., 3 e.	0.0427	0.0000	0.0144	904	Air Conditioner #2	0.1123	0.0137	0.0000
507	Burner Repair	0.0088	0.0276	0.0820	907	Range #1	0.0014	0.0168	0.0265
508	Boiler Repair, Tube	0.0095	0.0298	0.0883	908	Range #2	0.0067	0.0843	0.1323
509	Boiler Repair, Weld	0.0084	0.0267	0.0790	909	Carpet	0.3275	0.3804	0.3675
511	Range Repair	0.1818	0.0600	0.1388	910	Dresser	0.2110	0.1188	0.1222
512	Roof Repair	0.0356	0.0018	0.0000	911	Mattress & Box Spring	0.2027	0.1141	0.1173
513	Air Conditioner Repair	0.0374	0.0748	0.0447		REPLACEMENT COSTS	<b>1.0073</b>	<b>1.0071</b>	<b>1.0079</b>
514	Floor Maint. #1, Studio	0.0004	0.0021	0.0021					
515	Floor Maint. #2, 1 Br.	0.0007	0.0043	0.0043					
516	Floor Maint. #3, 2 Br.	0.0065	0.0395	0.0389					
518	Linen/Laundry Service	0.3271	0.1470	0.0299					
	CONTRACTOR SERVICES	<b>1.0311</b>	<b>1.0258</b>	<b>1.0257</b>		ALL ITEMS	<b>1.0125</b>	<b>1.0020</b>	<b>1.0002</b>

VIII. Expenditure Weights and Price Relatives, Lofts, 1998

Spec #	Item Description	Price Weights	Relative	Spec #	Item Description	Price Weights	Relative
101	TAXES	<b>0.2447</b>	<b>1.0240</b>		ADMINISTRATIVE COSTS, LEGAL	<b>0.1112</b>	<b>1.0430</b>
201	Payroll, Bronx, All	0.0000	1.0000	601	Management Fees	0.7945	1.0369
202	Payroll, Other, Union, Supts.	0.2989	1.0276	602	Accountant Fees	0.1562	1.0111
203	Payroll, Other, Union, Other	0.0000	1.0290	604	Newspaper Ads	0.0053	1.0561
204	Payroll, Other, Non-Union, All	0.5193	1.0403	605	Agency Fees	0.0067	1.0291
205	Social Security Insurance	0.0475	1.0210	606	Lease Forms	0.0114	1.0034
206	Unemployment Insurance	0.0102	0.9337	607	Bill Envelopes	0.0137	1.0081
207	Private Health & Welfare	0.1240	1.0283	608	Ledger Paper	0.0123	0.9906
	LABOR COSTS	<b>0.1101</b>	<b>1.0330</b>		ADMINISTRATIVE COSTS - OTHER	<b>0.1017</b>	<b>1.0316</b>
301	Fuel Oil #2	0.3334	0.8764	701	INSURANCE COSTS	<b>0.1606</b>	<b>0.9848</b>
302	Fuel Oil #4	0.5542	0.8389				
303	Fuel Oil #6	0.1124	0.8412	801	Light Bulbs	0.0390	1.0054
	FUEL	<b>0.0679</b>	<b>0.8516</b>	802	Light Switch	0.0476	1.0415
401	Electricity #1, 2,500 KWH	0.0135	0.9993	803	Wet Mop	0.0425	1.0061
402	Electricity #2, 15,000 KWH	0.1676	1.0118	804	Floor Wax	0.0401	1.0334
403	Electricity #3, 82,000 KWH	0.0000	1.0115	805	Paint	0.2127	1.0300
404	Gas #1, 12,000 therms	0.0051	1.0020	806	Pushbroom	0.0401	0.9341
405	Gas #2, 65,000 therms	0.0603	0.9267	807	Detergent	0.0343	1.0000
406	Gas #3, 214,000 therms	0.1524	0.9287	808	Bucket	0.0423	1.0335
407	Steam #1, 1.2m lbs	0.0163	0.9804	809	Washers	0.1033	1.0074
408	Steam #2, 2.6m lbs	0.0060	0.9762	811	Pine Disinfectant	0.0502	1.0000
409	Telephone	0.0119	1.0240	812	Window/Glass Cleaner	0.0528	1.0221
410	Water & Sewer	0.5668	1.0650	813	Switch Plate	0.0426	1.0210
	UTILITIES	<b>0.0805</b>	<b>1.0233</b>	814	Duplex Receptacle	0.0356	1.0000
501	Repainting	0.4065	1.0208	815	Toilet Seat	0.1016	1.0141
502	Plumbing, Faucet	0.1388	1.0309	816	Deck Faucet	0.1152	1.0533
503	Plumbing, Stoppage	0.1236	1.0307		PARTS AND SUPPLIES	<b>0.0237</b>	<b>1.0193</b>
504	Elevator #1, 6 fl., 1 e.	0.0541	1.0430	901	Refrigerator #1	0.0912	0.9877
505	Elevator #2, 13 fl., 2 e.	0.0368	1.0394	902	Refrigerator #2	0.4779	1.0000
506	Elevator #3, 19 fl., 3 e.	0.0208	1.0534	903	Air Conditioner #1	0.0175	0.9961
507	Burner Repair	0.0384	1.0366	904	Air Conditioner #2	0.0218	1.0144
508	Boiler Repair, Tube	0.0464	1.0255	905	Floor Runner	0.0859	1.0071
509	Boiler Repair, Weld	0.0356	1.0137	906	Dishwasher	0.0452	1.0375
510	Refrigerator Repair	0.0137	1.0029	907	Range #1	0.0431	1.0481
511	Range Repair	0.0143	1.0224	908	Range #2	0.2174	1.0131
512	Roof Repair	0.0554	1.0316		REPLACEMENT COSTS	<b>0.0195</b>	<b>1.0064</b>
513	Air Conditioner Repair	0.0098	0.9800				
514	Floor Maint. #1, Studio	0.0003	1.0396				
515	Floor Maint. #2, 1 Br.	0.0006	1.0406				
516	Floor Maint. #3, 2 Br.	0.0050	1.0385				
	CONTRACTOR SERVICES	<b>0.0801</b>	<b>1.0267</b>		ALL ITEMS	<b>1.0000</b>	<b>1.0096</b>