

1996 PRICE INDEX OF OPERATING COSTS

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' "cost of living" has 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 sixth year that the RGB staff has produced the price index and the first year that the index has been

Summary

The Price Index of Operating Costs for Rent Stabilized Apartment Buildings (PIOC) rose 6%, the largest increase since 1991. The single most important factor this year was the substantial increase in fuel and utility costs. Fuel oil costs skyrocketed 30% while utility costs rose nearly 8%. Together, these two components were responsible for more than half of the overall increase in the PIOC.

Despite the substantial increase in fuel and utility costs, largely due to aberrant weather conditions, inflation in many other sectors is well under control. The increase in Labor Costs (3.1%) was the lowest since 1976. The rise in the Contractor Services component (1.8%) was the second lowest in eleven years. Administrative Costs rose modestly (3.5%) and show no upward trend. In short, inflation among the labor-based components of the Price Index is very modest. This is important since these components constitute a large part (about 40%) of the PIOC.

In addition to computing the regular Price Index this year, staff also calculated a "core" PIOC which excludes the erratic changes in fuel oil, natural gas, and electricity costs (see page 11). The core PIOC, like the core Consumer Price Index, is useful for analyzing inflationary trends.

After reaching a low of 1.9% in 1994, the "core" rate has been creeping upward the last two years and will probably rise further (to 3%) in 1997. The increase in the core rate of inflation is almost entirely due to increases in real estate taxes and water/sewer fees. In the near future it appears government, not private businessmen, will have the greatest impact on landlords' costs.

The Price Index for Apartments is projected to increase 2.7% next year. Fuel costs will probably decline, the labor-based components (i.e. "Labor", "Contractor Services" and "Administrative Costs") will rise modestly, and government mandated costs (e.g. "Real Estate Taxes", "Water/Sewer Fees") will rise substantially.

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. Based on this year's increase in the PIOC and next year's PIOC projection, the commensurate is 4% for a one year lease and 5% for a two year lease (see page 13 for details and alternate versions of the commensurate).

Change In Costs for Rent Stabilized Apartment Buildings, April 1995 to April, 1996

Taxes	3.0%
Labor Costs	3.1%
Utilities Costs	7.8%
Fuel Costs	29.6%
Contractor Services	1.8%
Administrative Costs	3.5%
Insurance Costs	5.0%
Parts & Supplies	0.8%
Replacement Costs	1.0%
Overall	6.0%

undertaken without the assistance of Speedwell Inc. In previous years Speedwell has prepared the tax and water/sewer components of the PIOC. RGB staff's growing computer expertise made it possible to take on these last two 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 the report.

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 1994. A stratified sampling scheme was used to choose 6800 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 13.5% of the surveys mailed out were returned to the RGB. A total of 435 of these contained information which was used. The number of verified price quotes in 1995 and 1996 for the owner survey is shown in the appendix.

Fuel Oil Vendor Survey

Fuel price information has been gathered on a monthly or bi-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 don't 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 on a monthly basis. Some of these did agree to provide a year's worth of data in April 1996. The number of fuel quotes gathered this year was comparable to last year and is contained in the appendix.

Real Estate Tax Computations

The procedures used by RGB staff to compute the real estate tax component were in most respects identical to those used in the past by Speedwell Inc. 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 32,000 buildings in FY 1995 and FY 1996. This data was used to compute a tax bill for each stabilized building in FY '95 and FY '96. The change computed for the PIOC is simply the percentage increase in aggregate tax bills from FY '95 to FY '96.

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, toilet seats) 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. This year 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 1995. For a detailed description of the items priced and the number of price quotations obtained for each item, refer to the appendix.

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.

Price Index Components

Taxes



The tax component 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 1995 and FY 1996 (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 were up modestly this year, rising 3.0%. The change in taxes was largely due to a 2.5% increase in the tax rate. Expiring tax abatements and exemptions also played a role, accounting for the remaining half percent increase.

- **Tax Rate** – Although the overall property tax levy has not increased for several years (it actually fell in FY 1995), 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, which contains the vast majority of rent stabilized properties.

The increase in the tax rate for Class Two properties is a result of a State law which requires the tax levy to be distributed on the basis of class shares. More specifically, a large decline in the value of commercial properties compared to residential properties has shifted some of the tax burden from Class Four to other property classes, including Class Two.

Intervention by the Mayor and the City Council has softened the blow to rent stabilized properties somewhat. In FY 1995 the tax levy for Class Two properties was scheduled to increase 4.8% but action by the City Council limited the increase to 2.6%. In the current fiscal year the tax rate would have risen 5.6% had the City Council not intervened and limited the increase for Class Two properties to 2.4%.¹

- **Assessments** – The assessed valuations of rent stabilized buildings rose dramatically in the late '80's and through 1991, increasing 8% or more each year (see chart next 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 FY94 and 1.3% in 1995.

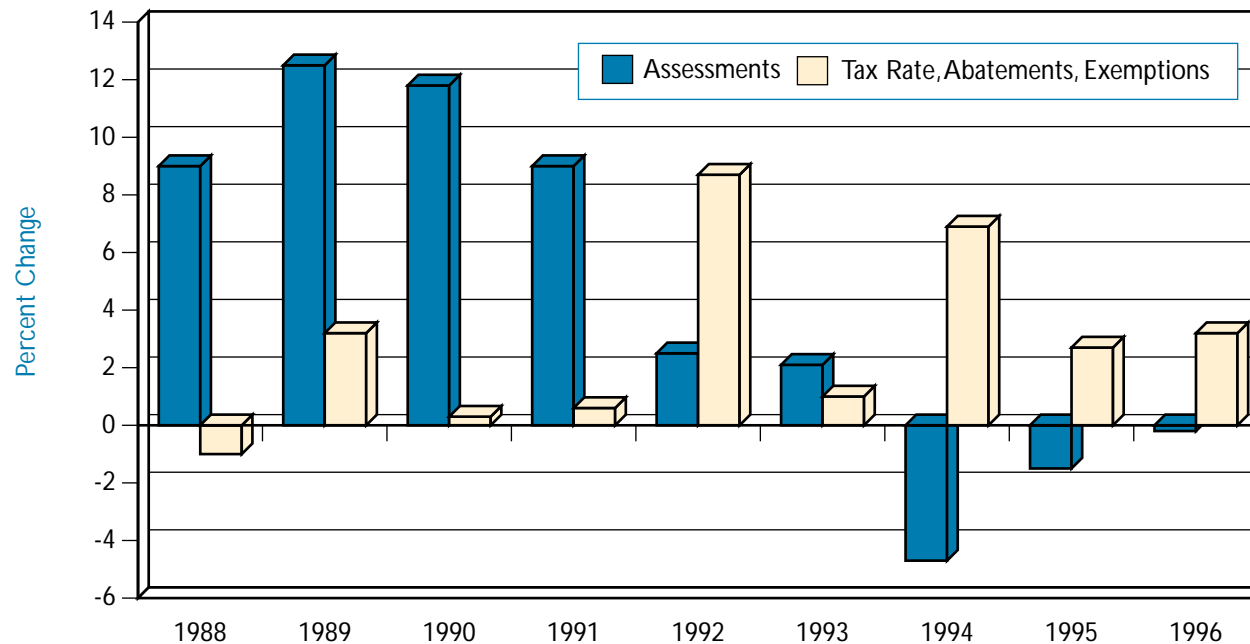
Billable assessments were fairly stable this year, falling a mere two-tenths of a percent. While valuations continued to decline in the outer boroughs (ranging from a decrease of .8% in the Bronx and Queens to 4.1% in Staten Island), the Manhattan "core" market showed some improvement, as assessments nudged ahead .6%.

The overall decline in billable assessments in the outer boroughs masks a substantial disparity between small and large buildings. While valuations for the smallest buildings (less than 10 units) rose 3.2%, billable assessments for the largest buildings (100 units or more) declined by 2.6%. In Brooklyn, the borough with the largest number of small rent stabilized buildings, assessments rose 3.8% for the smallest buildings and fell 6.0% for the largest buildings.

1. Note that the increase in the tax rate for rent stabilized properties (2.5%) was somewhat higher because not all rent stabilized buildings are in Class Two.

Billable Assessments were Flat this Year

(Change in Tax Bills due to Assessments vs. other Tax Factors)



Source: Department of Finance

The increase in assessments for small buildings is due in part to the lack of a “phase-in” of real estate taxes. While increased assessments for buildings with eleven or more units are subject to a five year phase-in, such is not the case for smaller buildings. Thus, if income and property values increase among small buildings, property tax increases can be immediate.

The 1995 Income and Expense Study showed that rents rose 3.6% in small buildings while expenses increased only 1.2%, thereby resulting in NOI growth of roughly 7%. Thus, assessment increases in small buildings appear to be based in part on real improvements in profitability.

• **Abatements and Exemptions** – The number of buildings with new tax abatements fell dramatically this year (see chart next page). The decline in new abatements, coupled with the expiration of existing abatements, resulted in an increase in the tax burden for landlords of .2%.

Expiring tax exemptions had an even larger effect. In Manhattan below 96th street expiring exemptions

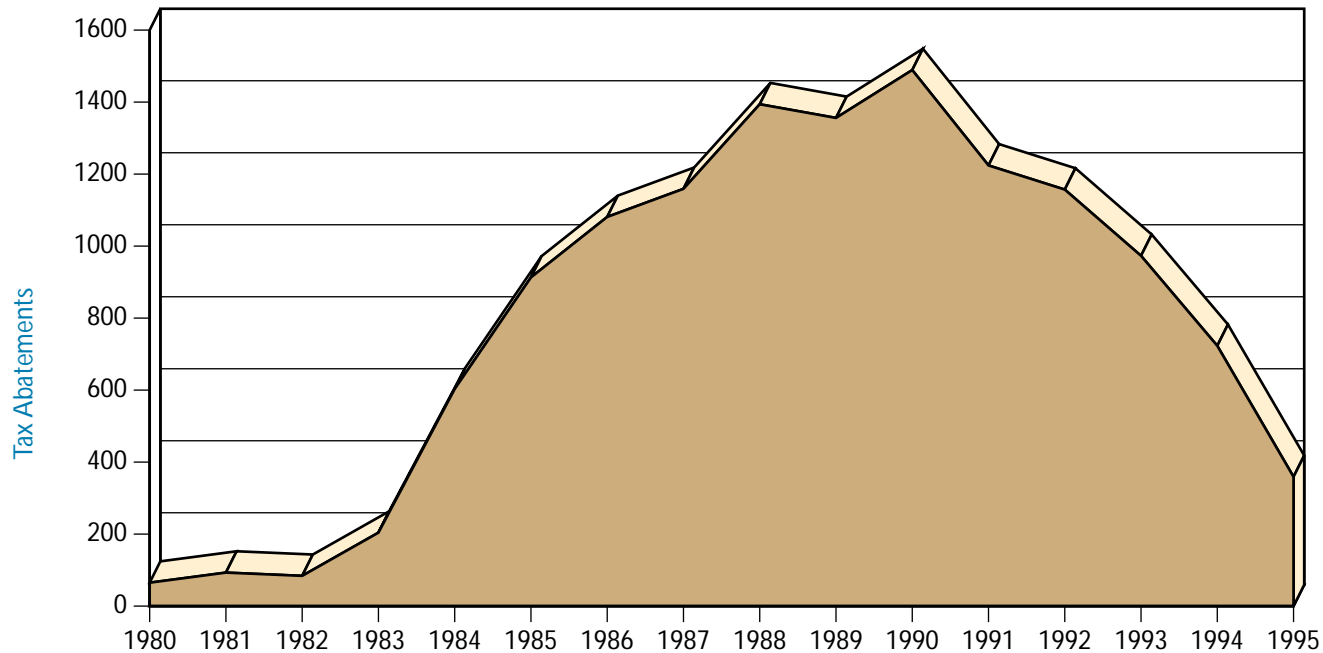
added .6% to the overall tax increase. While the impact was less in the outer boroughs, the citywide increase in taxes due to net expiration of exemptions was .5%. Given the lack of new investment in rental housing in recent years we expect expiring exemptions to continue to add to landlords’ tax burden in the near future.

• **New York City Tax Commission** – This year the Rent Guidelines Board was able to obtain data from the New York City Tax Commission. A list of properties which filed tax protests was matched with the PIOC tax sample. As a result, we were able to break out data for properties which filed with the Tax Commission and those which did not.

Of the 32,000+ rent stabilized buildings used in our tax calculations, approximately one-third (11,000) appealed their tax assessments by filing a Tax Commission Income and Expense form (TCIE). While nearly half of the stabilized properties in Manhattan filed, only one-fourth of Brooklyn owners did so.

New Tax Abatements Fell Sharply this Year

(Number of Initial Real Estate Tax Abatements by Year)

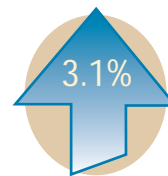


Source: Department of Finance

Building size was an important consideration. Only one-fourth of small buildings (less than 19 units) filed while two-thirds of large buildings (100+ units) protested their preliminary tax levy. Within each building size category, filers tended to have substantially higher tax bills than those which did not file. For instance, in the "small building" category, the average tax bill was \$7000 for buildings which did not file and \$21,000 for buildings which did file. The difference reflects both location and the presence of commercial income.

Did filing with the Tax Commission make a difference? The evidence is unclear on this point. While small buildings which filed had smaller increases in taxes on average than those which did not (2.4% vs. 4.1% respectively), the opposite was true for large buildings (4.0% vs. 1.2%). For medium sized buildings, which contain the majority of stabilized units, there was no difference in the increase for filers and non-filers.

Labor

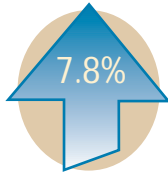


As predicted in last year's PIOC projection, increases in labor costs have continued to moderate, making this year's overall change of 3.1% the lowest since 1976. The RGB measures increases in the cost of labor by evaluating union and non-union salaries and benefits in addition to changes in social security and unemployment insurance. The cost of unionized labor comprises two-thirds of the Labor component and 10% of the entire price index.

The rate of increase in the labor component started declining in the mid-eighties and this year's growth rate is half that measured ten years ago. This notably low increase reflects a slowdown in benefit growth after a period of striking increases in the early 90's. The slowdown in benefit increases and a more stable, albeit moderate, growth rate for wages reflects union contract

agreements signed in 1994 that run through April 1997 for Local 32B-32J and March 1998 for Local 32E. Future wage and benefit increases written into these contracts suggest that the 1997 labor component of the price index will also be quite low.

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 actual billings from the City's Department of Finance and Department of Environmental Protection (DEP).

This year, utilities increased 7.8% - a dramatic change from last year's decrease of 4.0%. All expenses rose, except for telephone costs, making this year's increase the highest since 1993.

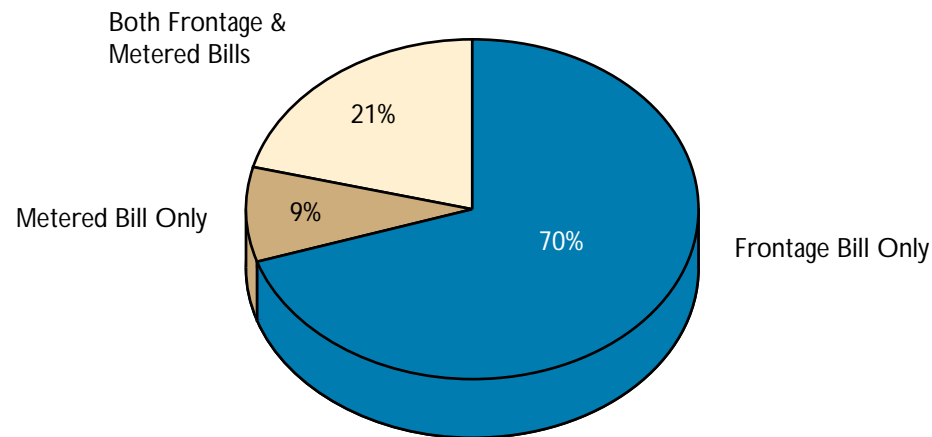
In previous years Speedwell Inc. obtained water/sewer billing information on 30,000+ properties from the Department of Finance's Open Balance Register. Although the water system was operated by DEP, Finance was responsible for billing customers. Last year this responsibility was assumed by DEP, rendering instantly obsolete all of Speedwell's PIOC computer programs for calculating the change in water/sewer costs.

In a sense, the decision by the RGB to bring the water/sewer component "in house" this year was propitious, since all of the computer programs had to be redesigned in any case. RGB staff worked with DEP over a six month period to define an "extract" from the DEP billing records. By late March data on frontage and metered bills had been obtained for roughly 32,000 rent stabilized properties.

Since we were able to "download" the water/sewer data to a personal computer, it was relatively easy to examine individual records and to "clean" the data. While the frontage bills appeared to be quite accurate (although some were "lost" in the transfer of data from Finance to DEP), many of the metered bills varied enormously from year to year. To offer an example,

Few Rent Stabilized Properties Are Billed Entirely By the Meter

(Type of Water/Sewer Bill received by Rent Stabilized Properties, 1995)



Source: NYC Department of Environmental Protection, Water/Sewer Billing Data

one property supposedly had daily consumption of 31,000 cubic feet of water in 1995 and only 200 in 1996!

An effort was made to eliminate suspect metered bills or to correct those bills where adequate information was available. Unfortunately, after working extensively with the data RGB staff concluded that the information from the DEP files for properties with metered bills was unreliable, and that no amount of remedial work would make it acceptable.

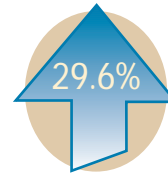
The increase in water/sewer costs from 1995 to 1996 in this price index is thus based ENTIRELY on frontage bills for 22,000 rent stabilized properties. While it is unfortunate that we could not use data for metered properties, it should be noted that 1) 70% of rent stabilized properties have "frontage only" bills, and therefore the "typical" rent stabilized property has no metered bill; 2) It is better to use reliable data than unreliable data in computing the increase in costs, even if some properties are excluded, and 3) The RGB staff will work with DEP to obtain more reliable data for the 1997 PIOC.

The increase in water/sewer costs this year was 4.7%, roughly in line with the 5% rate increase. About 86% of the properties had increases of 5%. Approximately 10% had less than 5% increases in their bills while 4% had increases of more than 5%.

Natural gas costs rose sharply this year. The PIOC measures gas, like fuel oil, largely on a "cost-weighted" basis which takes both the price and heating degree days into consideration. Due to fluctuating rates and the unusually snowy and cold winter as well as changes in the fuel adjustment factor, gas costs rose 20%. This double-digit rise contributed greatly to the overall increase in the utilities component.

Unlike the large increase in gas, electricity had a modest rise of about 3.7%. This small increase is partly due to the traditional method of measuring the electricity index from April-to-April rather than on a cost-weighted basis. The increase would have been much higher if the electricity index was measured February-to-February (9.5%). Since electricity is generated not only by fuel oil but by nuclear and hydro power, electric rates were not as affected by this year's volatile fuel oil market.

Fuel



Greater demand in the winter months coupled with refiners' search for oil in the early Spring led to skyrocketing prices resulting in this year's 29.6% increase in the fuel oil component. The fuel oil component measures changes in the price of three types of fuel oil - #2, #4, and #6.

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.

Oil prices reached a five year high during the month of March due to a combination of market forces. Cold weather from November through February increased demand for oil both here and in Western Europe. The large increase in heating requirements (especially during the months of December, January, and March) compared to last year helped drive prices up.

During these months of cold weather, refiners chose to maintain low reserves in anticipation of the reopening of the Iraqi oil market. Iraqi crude would have added 700,000 barrels a day to the Spring supply. Fearing oversupply during the Spring months, refiners waited for the results of the UN talks with Iraq. When negotiations stalled in the third week of March refiners were forced to scramble for oil thus driving up the price for consumers in the month of April.²

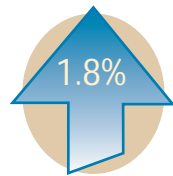
Of the three grades of fuel oil, #2 saw the least change (23%) while #4 went up 30%, and #6 increased 33%. The PIOC includes a different weight for each of the fuel grades which reflects the percentage of rent stabilized units using the particular type of fuel oil. In the current year's PIOC, #6 oil accounts for half of the fuel oil component while #4 oil accounts for 27% and #2 oil 22%.

Why did prices for #6 oil increase so much more than prices for #2 fuel oil? Competition to service the many small apartment owners who use #2 fuel oil apparently forced suppliers to absorb a portion of their

2. The *New York Times*, Thursday, March 21, 1996, "Run-up in Oil Price Halts: April Contract Falls \$1.28"

increase in costs in order to hold onto customers. However, only a few firms sell the #4 and #6 grades. This lack of competition allowed suppliers to pass on the full cost to large building owners who primarily use these less refined types of fuel.

Contractor Services



Contractor Services increased 1.8% in 1996, the second lowest rate of growth in eleven years. Sixteen items comprise this component of which repainting and plumbing costs are by far the most important.

In 1994, we suggested that the record low increase of .9% was primarily due to painters slashing prices in an effort to hold onto customers. Last year more painters raised prices but the Contractor Services growth rate was still only 2.4%. This year's small increase in costs was affected considerably by a .2% decrease in painter's fees and, to a much lesser extent, larger decreases in floor maintenance costs. While many painters surveyed this year noted that the price of paint and labor had increased, most maintained or lowered their prices in order to stay competitive.

Boiler and roof repair went up considerably this year - 4.0% and 4.6% respectively. This winter's heavy snowfall put pressure on both heating systems and roofs driving up demand for the services of plumbers and roofers, and consequently prices. The moderate increases in the remaining items in Contractor Services (elevator, range and air conditioning repair) helped dampen the effects of boiler, roof and plumbing repair in the final calculation of the Contractor Services component of the index.

Administrative Costs



Administrative Costs rose 3.5%, which is slightly higher than the average of the past five years. Fees paid to management companies, accountants, and attorneys comprise the bulk of this component. Accountants had the highest increase (3.9%). Management companies, which tend to base their fees on rental occupancy, had an

increase of 3.6%. Attorney fees rose only 0.9% - much less than last year's figure of 4.5%.

During the last five years, administrators have had higher increases than their counterparts, skilled contractors. The trend continues this year - Contractor Services increased only 1.8%. Part of the difference between the two components is undoubtedly due to the relatively strong rental market and the resulting increase in Management Fees, which is about half of the Administrative Costs component. Demand for Contractor Services, on the other hand, is linked to a greater degree to overall economic conditions which remain relatively anemic.

Insurance



Insurance Costs rose 5.0% this year, down slightly from last year's increase of 5.2%. The increase in costs was due in large part to higher insurance rates. Of the 430 owners who responded to our survey 152 (35%) reported an increase in rates while only one fourth as many (9%) reported a decrease.

Changes in insurance coverage also contributed to the substantial rise in insurance costs. Over a quarter of the respondents indicated some sort of change in their insurance policy. Increased insured value was the main form of coverage affected. In 95% of the policies where the insured value of the building was increased the cost of insurance went up.

In recent years, the lead paint issue has come to the forefront of building owner concerns. Not only are owners removing lead paint from their buildings at an increased rate but insurance companies are rethinking their commitment to insure for lead paint liability. Many companies have removed lead paint coverage altogether making it more difficult and more costly for owners to obtain this type of coverage.

The Owner Survey found that 26 respondents no longer were covered for lead paint liability while only 3 added lead paint coverage. Of those who dropped their lead paint coverage only half benefitted from lower insurance costs. The very small group of owners who added lead paint coverage saw their insurance costs rise an average of 26%.

Parts and Supplies



The overall increase in the Parts and Supplies component was less than 1%. Increases in this component have been fairly consistent and generally very low since the early '80's. This year is no exception. Price increases ranged from a high of 4.8% (new electrical switch plate) to a decrease of .4% (bucket).

Replacement Costs



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

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

Change In Costs for Rent Stabilized Hotel Buildings, April 1995 to April, 1996

Taxes	1.6%
Labor Costs	3.7%
Utilities Costs	6.1%
Fuel Costs	25.7%
Contractor Services	1.1%
Administrative Costs	4.2%
Insurance Costs	5.0%
Parts & Supplies	0.3%
Replacement Costs	2.8%
Overall	5.2%

their dissimilar operating cost profiles) and an index for all hotels.

The price index for all hotels rose 5.2% this year, somewhat less than the increase in the apartment price index. The primary differences between the hotel index and the apartment index were in the taxes and utilities components. Taxes rose only 1.6% overall (vs. 3.0% in apartments) due to a slight decrease in taxes for large hotels. Utilities were up only 6.1% (vs. 7.8% in the apartment sector) because hotels spend less of their budget on gas and more on electricity. Electricity costs were only up 2 to 4%.

Among the different categories of hotels, the increases were: Hotels 3.9%, Rooming Houses 6.5%, and SROs 6.5%. The smaller rate of increase for the "Hotels" category was largely due to a slight decrease in taxes for these buildings (vs. increases of 5.5% and 1.9% for Rooming Houses and SROs respectively). In addition, labor (which rose modestly) is a large portion of the cost of running large Hotels.

Rent Stabilized Lofts

The increase in the Loft Index this year was 4.8%, somewhat below the increase for apartments. The lesser rate of increase was primarily due to the significance of

Change In Costs for Rent Stabilized Loft Buildings, April 1995 to April, 1996

Taxes	3.0%
Labor Costs	3.3%
Utilities Costs	7.8%
Fuel Costs	27.6%
Contractor Services	1.8%
Administrative Costs, Legal	0.9%
Administrative Costs, Other	3.9%
Insurance Costs	5.0%
Parts & Supplies	0.8%
Replacement Costs	1.0%
Overall	4.8%

legal costs for lofts (12% of the index) and the low rate of increase for these costs (.9%). In all other respects, increases in the Loft Index were quite similar to increases in the Apartment Index.

1996-97 PIOC Projections

Summary

Fluctuations in the price of various operating costs were easier to project for 1996 than the previous year, despite an unusually severe winter which caused fuel oil prices to skyrocket. This predictability stemmed from relatively stable growth in Labor Costs, Contractor Services, Administrative Costs, Parts & Supplies and Replacement Costs. The price of heating fuels rose much faster (30%) than predicted (10%). Property taxes, utility and insurance prices were also somewhat higher than projected. In contrast, the cost of labor, administration, contractor services and replacements did not increase as fast as estimated last year.

The volatility of fuel oil prices, and their destabilizing effects on electricity and gas costs, has hampered the accuracy of PIOC projections over the past several years. Fuel-related costs (heating fuel, electricity and gas) compose roughly one-sixth of the market basket of operating costs measured by the PIOC. Large changes in fuel prices can mask smaller changes in non-fuel-related costs resulting from local trends, such as declining unemployment or growth in the gross city product. While property owners and tenants are affected by forces operating within and outside of New York, the drastic and somewhat cyclical nature of fuel price changes in recent years seems to obscure the deeper long term movement of the PIOC.

To gauge long term movements in prices, RGB staff has estimated changes in both the regular PIOC and a "core" PIOC for 1997. Projection of the "core" PIOC holds fuel-related cost components constant while estimating growth in non-fuel related operating costs. Overall, the PIOC is expected to grow by 2.7% between 1996 and 1997, while the "core" PIOC is expected to increase by 3% over the same period. Projected changes in the index's separate components are shown alongside actual increases observed from 1995 to 1996 in the chart on page 12.

Taxes 3.7%

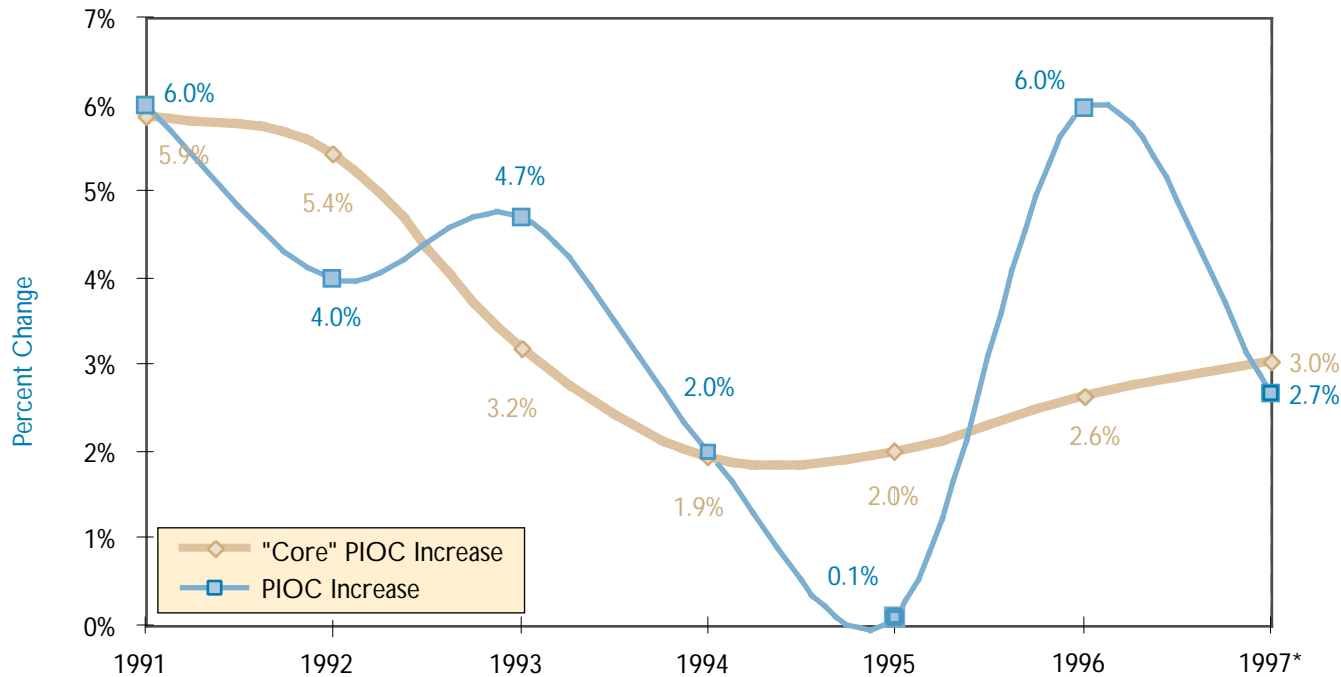
Property taxes comprise roughly a quarter of the PIOC. Tax increases tended to exceed overall growth in the PIOC from the mid-1980's until the early 1990's, when the city's moribund economy depressed tax assessments to the point where tax growth lagged behind the overall price index. This trend is beginning to reverse, as assessed values stabilize.

The distribution of New York City's tax burden among various types of property in the city usually changes from year to year. Since 1990, Class Two properties (which include rent stabilized buildings) have assumed a greater share of the city's tax levy, mainly because of sharp drops in the value of office and retail properties. Although commercial real estate is regaining value, particularly in Manhattan, Class Two properties are expected to shoulder a greater share of the city's tax levy in the near future. Barring action from the Mayor and City Council, this should result in an increase in the tax rate for Class Two buildings next year.

Class Two property includes co-ops and condominiums as well as apartments. Within the Class Two category, rent stabilized dwellings are classified as either "rental buildings" or "4-10 family buildings". Based on the preliminary tax roll, the Finance Department forecasts billable assessments for rental buildings to increase by only 0.1%, while billables for 4-10 family buildings are expected to increase by 2.1%. Overall, billable assessments for stabilized buildings, which are predominantly classified as "rental" buildings, would increase by 0.4% from 1996 to 1997.

In the past, the Finance Department's preliminary tax roll, which is an estimate, has tended to be higher than the final tax roll, upon which taxes are actually calculated. Accurate tax projections must adjust for this "gap", which amounted to .5% for stabilized properties in 1996. Assuming that the discrepancy between the preliminary and final tax roll is also .5% in FY '96, billables should decline by .1%. This slight decline in billables, combined with a projected 3.7% tax rate increase should result in a 3.7% increase in tax bills for rent stabilized buildings.

The "Core" PIOC Shows Inflationary Trends More Accurately than the Actual PIOC



* Note: The percent change for 1997 was estimated.

Source: Price Indices of Operating Costs, 1991-1996

Labor Based Components (Labor Costs +4%, Administrative Costs +3.7% and Contractor Services +1.7%)

Of the three components listed above, "Labor Costs", comprising the wages and benefits of building maintenance workers (e.g. superintendents, porters, etc), is the largest. "Contractor Services" primarily covers the work of plumbers and painters while "Administrative Costs" pertain to management, legal and accounting fees.

Growth in wages and benefits this past year was the lowest observed since 1985. Next year, growth in non-union wages and benefits should drive "Labor Costs" up by 4%. This projection relies on the most recent multi-year contract agreements negotiated between building owners and unions representing building workers and, in the case of non-union employees, average increases in wages and benefits observed over the past three years.

Similarly projected increases in "Administrative Costs" (3.7%) and the price of "Contractor Services"

(1.7%) were derived from average growth rates witnessed in both components during the past three years.

Fuel -6.1%

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 wars or natural disasters) fuel oil prices in New York City should drift downward somewhat in 1996 and 1997, falling by 6.1% in response to increased production from non-OPEC producers, "normal" winter weather and slackening growth in the national economy.

The Energy Information Administration (EIA) currently projects that world oil prices will hover around \$16 per barrel between the fourth quarter of 1995 and the fourth quarter of 1996. The first assumption behind this forecast is that non-OPEC producers will continue to increase their efficiency, and that OPEC countries will cut prices to retain market share. The second major assumption holds that national demand for oil will not

increase rapidly, as rising interest rates and inflation dampen economic growth in the upcoming year. As usual, winter weather for the mid-Atlantic region is assumed to be "normal".

Overall, using EIA forecasts of increasing global production and stable national demand (and assuming fairly "normal" weather conditions), fuel oil prices in the New York area should decline by 6.1% in 1997.

Insurance Costs + 4.4%

Insurance Costs for rent stabilized buildings have risen faster than 5% since 1995. This year's increase of 5.0% was well above the rate predicted last year. Based on the latest three-year weighted average, Insurance Costs should rise by 4.4% over the coming year.

Utility Costs + 4.9%

Utility Costs encompass the price of electricity, natural gas, water and sewer service, purchased steam,

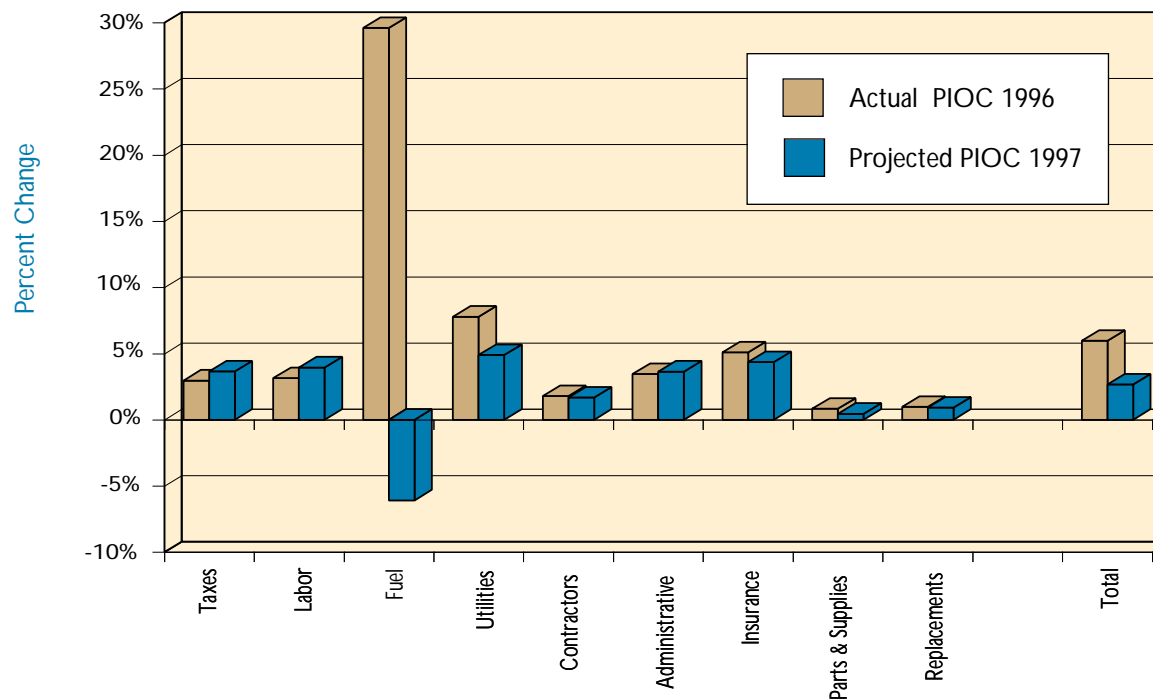
and telephone service. Water and sewer costs alone account for nearly 60% of the utility index, while electricity and gas comprise another 35% of the category.

Next year the overall price of utilities should increase by 4.7%. The bulk of this growth will come from rising water and sewer rates (6.5%), combined with more moderate increases in the costs of natural gas (5.6%) and electricity (0.1%).

The New York State Public Service Commission (PSC) estimates that electricity rates, which dropped slightly in April, will remain stable through 1997. Additionally, the PSC predicts that stagnant oil prices should keep fuel adjustment charges from increasing sharply over the year. Thus, the price of electricity should remain stable over the coming year if climate patterns follow normal trends and the price of fuel behaves as predicted.

In contrast to electricity, rates for natural gas should rise over the coming year. Both Con Ed and Brooklyn Union Gas plan to petition the Public Service Commission for increases in gas rates in October, as

Skyrocketing Fuel Costs Pushed the PIOC to 6% this Year



Source: Price Indices of Operating Costs, 1996, PIOC projection for 1997

record demand for natural gas across the nation propels the price upwards. Overall, rising nationwide gas demand and Con Ed's request should boost overall gas rates in New York City by roughly 5.5% 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 consecutive double digit increases, water and sewer rates were frozen by Mayor Dinkins from 1993 to 1995. Last year, rates were unfrozen, and rose by 4.7%. Assuming the current proposals for rate increases are approved by the Water Board, water/sewer rates will probably increase by about 6.5% in 1997.

In total, a 6.5% increase in water and sewer charges, combined with 5.5% growth in natural gas prices and relatively stable electricity rates, should cause Utility Costs to rise by 4.7% in 1997.

Parts & Supplies + .5%

Traditionally, Parts and Supplies has been a very small part of the PIOC, comprising less than 3% of the 1996 index. Over the last three years, growth in this component has been stagnant. Based on the latest three year average, the cost of Parts and Supplies should increase by .5%.

Replacement Costs + .9%

This component accounted for roughly 1% of the entire price index in 1996. This past year, growth in Replacement Costs continued to decelerate. According to the current three year price trend, Replacement Costs should rise by .9% over the next year.

Commensurate Rent Increase

The commensurate rent increase is a formula which the RGB has used throughout its history. The commensurate rent increase has been explained as the percentage rent increase needed to maintain landlords' current dollar net operating income (NOI) at a constant level. The commensurate rent increase for this year is³:

One Year Lease	Two Year Lease
4%	5%

As a means of compensating landlords for cost increases, the commensurate rent increase formula has two major drawbacks. First, although the formula is supposed to keep landlords' current dollar income at a fixed level, the formula doesn't consider the mix of one and two year lease renewals. Since only two-thirds of leases are renewed in any given year, and a preponderance of leases are for two years, the formula does not necessarily accurately estimate the amount of income needed to compensate landlords for past O&M increases.

A second possible 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, although this is not an inevitable consequence of using the commensurate.⁴

An alternative to the commensurate rent increase adjusts for the mix of lease terms and sources of landlord revenue allowed by the RGB other than lease renewals (e.g. vacancy renewals). This is called the "Net Revenue" rent increase, and takes into consideration the mix of leases actually signed by tenants but does NOT adjust NOI for inflation. Two guidelines which would preserve "Net Revenue" in the face of this year's 6.0% increase in PIOC measured costs are⁵:

Computation of "Net Revenue" Increases

	1 Year Lease	2 Year Lease	Vacancy Allowance	Low Rent Supplement
Option One (Lease renewals only)	5%	7%	-	-
Option Two (Lease renewals, vacancy allowance and low-rent supplement)	3%	4%	8.5%	\$20

An alternative to this "Net Revenue" formula would be to consider lease terms and to adjust NOI upward to

3. The accuracy of the PIOC is assumed as is the collectibility of legally authorized increases. Calculating the "traditional" Commensurate Rent Increase requires an assumption about next year's PIOC. In this case we use 2.7%, staff's PIOC projection for 1997.

4. 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.

reflect inflation so that BOTH O&M and NOI remain constant. We will call this the “Net Revenue with Adjusted NOI” increase. Assuming that revenue from an across-the-board vacancy allowance and a \$20 surcharge (for units renting below \$400) is included in these calculations, a variety of guidelines would preserve “Net Revenue” in the face of 3.5% growth in the Consumer Price Index alongside a 6.0% rise in the PIOC⁶:

Computation of “NOI Adjusted Net Revenue” Increases

	1 Year Lease	2 Year Lease	Vacancy Allowance	Low Rent Supplement
Option One (Lease renewals only)	7%	8%	-	-
Option Two (Lease renewals, vacancy allowance and low-rent supplement)	4.5%	6%	8.5%	\$20

All of these methods have their limitations. The traditional commensurate increase is artificial and doesn’t 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 “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 formulas may be best thought of as a starting point for deliberations. The staff’s other research (e.g. the mortgage survey or the I&E study) and testimony to the board can be used to modify the various estimates depending on these other considerations. □

5. The following assumptions were used in the computations: (1) The required increase in landlord revenue is 4%, or 67.6% of the 1996 PIOC increase of 5.95%; (2) These lease terms are only illustrative. Other combinations of one and two year lease increases could also result in a 4% revenue increase. (3) Lease terms were derived from the 1993 NYC Housing and Vacancy Survey. According to the HVS, 29% of all tenants have a one-year lease and 72% have two-year leases half of which renew in a given year. As a result, 65% of tenants renew their leases in a given year. The increase in landlords’ revenue reflects this lease distribution. (4) The 1993 HVS showed a turnover rate of 12.3%. As a result of turnover, landlords can expect an increase in revenue of about one percent, given the 8.5% vacancy allowance. This assumes that the vacancy allowance is charged and is collectible in all cases.

6. Note: The NOI was adjusted upward by the most recent yearly increase in the Consumer Price Index, March 1995 to March 1996, which amounted to 3.5%.

APPENDIX

I. PIOC Sample, Number of Price Quotes per Spec, 1995 vs. 1996

Spec	Description	1995	1996	Spec	Description	1995	1996
211	Apartment Value	136	101	701	INSURANCE COSTS	448	430
212	Non-Union Super	61	66				
216	Non-Union Janitor/Porter	42	42	801	Light bulbs	6	5
	LABOR COST	239	209	802	Light Switch	7	6
				803	Wet Mop	7	5
301	Fuel Oil #2	35	33	804	Floor Wax	8	8
302	Fuel Oil #4	10	9	805	Paint	10	12
303	Fuel Oil #6	8	7	806	Pushbroom	7	6
	FUEL COSTS	53	49	807	Detergent	5	9
				808	Bucket	11	12
501	Repainting	132	126	809	Washers	11	11
502	Plumbing, Faucet	38	38	810	Linens	10	10
503	Plumbing, Stoppage	37	41	811	Pine Disinfectant	5	9
504	Elevator #1	11	11	812	Window/Glass Cleaner	5	9
505	Elevator #2	10	11	813	Switch Plate	7	8
506	Elevator #3	10	10	814	Duplex Receptacle	5	6
507	Burner Repair	10	15	815	Toilet Seat	11	17
508	Boiler Repair, Tube	10	11	816	Deck Faucet	14	15
509	Boiler Repair, Weld	5	7		PARTS & SUPPLIES	129	148
510	Refrigerator Repair	6	11	901	Refrigerator #1	8	11
511	Range Repair	10	10	902	Refrigerator #2	12	11
512	Roof Repair	22	23	903	Air Conditioner #1	7	6
513	Air Conditioner Repair	6	9	904	Air Conditioner #2	5	6
514	Floor Maint. #1	7	10	905	Floor Runner	9	8
515	Floor Maint. #2	7	10	906	Dishwasher	5	7
516	Floor Maint. #3	7	10	907	Range #1	8	7
518	Linen/Laundry Service	5	5	908	Range #2	6	6
	CONTRACTOR SERVICES	333	358	909	Carpet	11	10
				910	Dresser	7	12
601	Management Fees	52	57	911	Mattress & Box Spring	7	11
602	Accountant Fees	38	33		REPLACEMENT COSTS	85	95
603	Attorney Fees	22	23				
604	Newspaper Ads	16	19				
605	Agency Fees	5	5				
606	Lease Forms	7	7				
607	Bill Envelopes	10	10				
608	Ledger Paper	6	5				
	ADMINISTRATIVE COSTS	156	159		All Items	1443	1448

II. Expenditure Weights, Price Relatives, Percent Changes and Standard Errors, All Apartments, 1996

Spec #	Item Description	Expenditure Weights	Price Relative	% Change	Standard Error	Spec #	Item Description	Expenditure Weights	Price Relative	% Change	Standard Error
101	REAL ESTATE TAXES	0.2628	1.0296	2.96%	0.1026	601	Management Fees	0.6732	1.0364	3.64%	0.6042
201	Payroll, Bronx, All	0.1227	1.0342	3.42%	0.0000	602	Accountant Fees	0.1444	1.0393	3.93%	1.1334
202	Payroll, Other, Union, Supts.	0.1193	1.0192	1.92%	0.0000	603	Attorney Fees	0.1419	1.0094	0.94%	0.6303
203	Payroll, Other, Union, Other	0.2937	1.0192	1.92%	0.0000	604	Newspaper Ads	0.0041	1.0793	7.93%	2.6421
204	Payroll, Other, Non-Union, All	0.2661	1.0368	3.68%	3.4295	605	Agency Fees	0.0047	1.2396	23.96%	10.7839
205	Social Security Insurance	0.0481	1.0178	1.78%	0.0000	606	Lease Forms	0.0108	1.0213	2.13%	1.6123
206	Unemployment Insurance	0.0100	0.9783	-2.17%	0.0000	607	Bill Envelopes	0.0107	1.1019	10.19%	5.6722
207	Private Health & Welfare	0.1400	1.0640	6.40%	0.0000	608	Ledger Paper	0.0102	1.0269	2.69%	2.7277
	LABOR COSTS	0.1711	1.0315	3.15%	0.9126		ADMINISTRATIVE COSTS	0.0843	1.0346	3.46%	0.4558
301	Fuel Oil #2	0.2666	1.2261	22.61%	0.8564	701	INSURANCE COSTS	0.0663	1.0501	5.01%	0.3295
302	Fuel Oil #4	0.2158	1.2955	29.55%	1.2225	801	Light Bulbs	0.0400	1.0000	0.00%	0.0000
303	Fuel Oil #6	0.5176	1.3321	33.21%	0.4613	802	Light Switch	0.0486	1.0210	2.10%	2.0628
	FUEL	0.0883	1.2960	29.60%	0.4228	803	Wet Mop	0.0430	1.0000	0.00%	1.2537
401	Electricity #1, 2,500 KWH	0.0151	1.0247	2.47%	0.0000	804	Floor Wax	0.0407	1.0068	0.68%	0.4775
402	Electricity #2, 15,000 KWH	0.1840	1.0379	3.79%	0.0000	805	Paint	0.2135	1.0137	1.37%	1.3953
403	Electricity #3, 82,000 KWH	0.0000	1.0246	2.46%	0.0000	806	Pushbroom	0.0406	1.0000	0.00%	0.0000
404	Gas #1, 12,000 therms	0.0056	1.1244	12.44%	0.0000	807	Detergent	0.0344	1.0126	1.26%	0.8732
405	Gas #2, 65,000 therms	0.0560	1.1962	19.62%	0.0000	808	Bucket	0.0427	0.9964	-0.36%	0.3720
406	Gas #3, 214,000 therms	0.1401	1.2020	20.20%	0.0000	809	Washers	0.1038	1.0000	0.00%	0.0000
407	Steam #1, 1.2m lbs	0.0156	1.1718	17.18%	0.0000	811	Pine Disinfectant	0.0503	1.0075	0.75%	0.4870
408	Steam #2, 2.6m lbs	0.0058	1.1962	19.62%	0.0000	812	Window/Glass Cleaner	0.0538	1.0044	0.44%	0.4569
409	Telephone	0.0134	0.9963	-0.37%	0.0000	813	Switch Plate	0.0408	1.0476	4.76%	4.9416
410	Water & Sewer	0.5645	1.0474	4.74%	0.1280	814	Duplex Receptacle	0.0368	1.0000	0.00%	0.0000
	UTILITIES	0.1410	1.0779	7.79%	0.0723	815	Toilet Seat	0.1007	1.0002	0.02%	2.0352
501	Repainting	0.4192	0.9998	-0.02%	1.1370	816	Deck Faucet	0.1103	1.0123	1.23%	1.3304
502	Plumbing, Faucet	0.1346	1.0486	4.86%	1.3436		PARTS AND SUPPLIES	0.0239	1.0084	0.84%	0.4569
503	Plumbing, Stoppage	0.1250	1.0222	2.22%	1.0405	901	Refrigerator #1	0.0889	1.0217	2.17%	0.6935
504	Elevator #1, 6 fl., 1 e.	0.0494	1.0235	2.35%	0.8201	902	Refrigerator #2	0.4776	1.0105	1.05%	0.8321
505	Elevator #2, 13 fl., 2 e.	0.0346	1.0224	2.24%	0.7430	903	Air Conditioner #1	0.0175	1.0179	1.79%	1.8161
506	Elevator #3, 19 fl., 3 e.	0.0196	1.0210	2.10%	0.7649	904	Air Conditioner #2	0.0218	1.0214	2.14%	2.1017
507	Burner Repair	0.0398	1.0088	0.88%	0.4172	905	Floor Runner	0.0866	1.0000	0.00%	0.1763
508	Boiler Repair, Tube	0.0450	1.0235	2.35%	1.4183	906	Dishwasher	0.0454	1.0047	0.47%	0.4940
509	Boiler Repair, Weld	0.0342	1.0630	6.30%	4.3299	907	Range #1	0.0430	1.0062	0.62%	0.6233
510	Refrigerator Repair	0.0136	1.0180	1.80%	1.8426	908	Range #2	0.2191	1.0065	0.65%	0.6489
511	Range Repair	0.0145	1.0064	0.64%	2.2804		REPLACEMENT COST	0.0104	1.0097	0.97%	0.4319
512	Roof Repair	0.0544	1.0459	4.59%	2.2419		ALL ITEMS	1.0000	1.0595	5.95%	0.1901
513	Air Conditioner Repair	0.0099	1.0116	1.16%	0.0000						
514	Floor Maint. #1, Studio	0.0003	1.0041	0.41%	3.7968						
515	Floor Maint. #2, 1 Br.	0.0006	0.9837	-1.63%	3.1372						
516	Floor Maint. #3, 2 Br.	0.0053	0.9634	-3.66%	3.5862						
	CONTRACTOR SERVICES	0.1520	1.0179	1.79%	0.5679						

III. Price Relatives by Building Type, Apartments, 1996

Spec #	Item Description	Pre-1947	Post-1947	Gas Heated	OIL Heated	MASTER METERED BLDGS	Spec #	Item Description	Pre-1947	Post-1947	Gas Heated	OIL Heated	MASTER METERED BLDGS								
101	REAL ESTATE TAXES	1.0296	1.0296	1.0296	1.0296	1.0296	601	Management Fees	0.6199	0.7955	0.6465	0.7034	0.4683								
201	Payroll,Bronx,All	0.1746	0.0725	0.0021	0.1537	0.0000	602	Accountant Fees	0.1761	0.1172	0.1060	0.1601	0.3601								
202	Payroll,Other,Union,Supts.	0.1239	0.1189	0.1488	0.1102	0.0940	603	Attorney Fees	0.1784	0.0993	0.2398	0.1270	0.1446								
203	Payroll,Other,Union,Other	0.1801	0.4346	0.3495	0.2830	0.3802	604	Newspaper Ads	0.0053	0.0032	0.0073	0.0040	0.0044								
204	Payroll,Other,Non-Union,All	0.3729	0.1658	0.3388	0.2765	0.4003	605	Agency Fees	0.0071	0.0042	0.0097	0.0053	0.0058								
205	Social Security Insurance	0.0449	0.0537	0.0527	0.0480	0.0460	606	Lease Forms	0.0155	0.0052	0.0076	0.0116	0.0172								
206	Unemployment Insurance	0.0095	0.0102	0.0105	0.0101	0.0131	607	Bill Envelopes	0.0168	0.0055	0.0082	0.0125	0.0185								
207	Private Health & Welfare	0.1269	0.1740	0.1274	0.1505	0.0957	608	Ledger Paper	0.0149	0.0049	0.0073	0.0111	0.0165								
LABOR COSTS						1.0329	1.0299	1.0298	1.0319	1.0294	ADMINISTRATIVE COSTS			1.0341	1.0351	1.0325	1.0349	1.0354			
301	Fuel Oil #2	0.3952	0.1184	0.0081	0.3258	0.4882	701	INSURANCE COSTS	1.0501	1.0501	1.0501	1.0501	1.0501								
302	Fuel Oil #4	0.3337	0.1147	0.2024	0.2751	0.2060	801	Light Bulbs	0.0391	0.0418	0.0409	0.0397	0.0765								
303	Fuel Oil #6	0.5596	1.0855	1.1152	0.6953	0.5899	802	Light Switch	0.0486	0.0519	0.0509	0.0493	0.0951								
FUEL						1.2885	1.3186	1.3257	1.2962	1.2841	803	Wet Mop	0.0406	0.0484	0.0345	0.0472	0.0553				
401	Electricity #1, 2,500 KWH	0.0229	0.0011	0.0264	0.0120	0.0000	804	Floor Wax	0.0387	0.0462	0.0329	0.0450	0.0527								
402	Electricity #2, 15,000 KWH	0.1545	0.2619	0.0878	0.2360	0.0000	805	Paint	0.2187	0.2115	0.2454	0.2082	0.1114								
403	Electricity #3, 82,000 KWH	0.0000	0.0000	0.0000	0.0000	0.5556	806	Pushbroom	0.0404	0.0410	0.0291	0.0399	0.0466								
404	Gas #1, 12,000 therms	0.0089	0.0012	0.0055	0.0069	0.0002	807	Detergent	0.0329	0.0393	0.0280	0.0382	0.0448								
405	Gas #2, 65,000 therms	0.0833	0.0352	0.1662	0.0369	0.0174	808	Bucket	0.0402	0.0480	0.0341	0.0466	0.0546								
406	Gas #3, 214,000 therms	0.1550	0.1942	0.4949	0.0413	0.0566	809	Washers	0.1089	0.0924	0.1122	0.0996	0.0554								
407	Steam #1, 1.2m lbs	0.0001	0.0535	0.0014	0.0001	0.0000	811	Pine Disinfectant	0.0496	0.0530	0.0519	0.0503	0.0971								
408	Steam #2, 2.6m lbs	0.0001	0.0203	0.0004	0.0001	0.0000	812	Window/Glass Cleaner	0.0529	0.0565	0.0553	0.0535	0.1034								
409	Telephone	0.0148	0.0105	0.0087	0.0156	0.0165	813	Switch Plate	0.0403	0.0482	0.0343	0.0468	0.0549								
410	Water & Sewer	0.6361	0.5043	0.3391	0.7058	0.3974	814	Duplex Receptacle	0.0347	0.0414	0.0295	0.0404	0.0473								
UTILITIES						1.0757	1.0821	1.1305	1.0546	1.0437	815	Toilet Seat	0.1056	0.0896	0.1088	0.0967	0.0538				
501	Repainting	0.4002	0.4702	0.5473	0.3872	0.3655	816	Deck Faucet	0.1171	0.0995	0.1207	0.1072	0.0596								
502	Plumbing, Faucet	0.1631	0.0813	0.1353	0.1385	0.1545	PARTS AND SUPPLIES			1.0084	1.0086	1.0085	1.0085	1.0086							
503	Plumbing, Stoppage	0.1472	0.0747	0.1244	0.1273	0.1420	901	Refrigerator #1	0.0877	0.0984	0.0739	0.0987	0.0800								
504	Elevator #1, 6 fl., 1 e.	0.0631	0.0166	0.0204	0.0567	0.0008	902	Refrigerator #2	0.4759	0.4984	0.4009	0.4997	0.4052								
505	Elevator #2, 13 fl., 2 e.	0.0179	0.0831	0.0050	0.0446	0.0974	903	Air Conditioner #1	0.0094	0.0376	0.0241	0.0158	0.0112								
506	Elevator #3, 19 fl., 3 e.	0.0068	0.0560	0.0410	0.0163	0.0343	904	Air Conditioner #2	0.0118	0.0468	0.0300	0.0197	0.0140								
507	Burner Repair	0.0407	0.0389	0.0202	0.0471	0.0357	905	Floor Runner	0.0818	0.0975	0.0459	0.0979	0.2330								
508	Boiler Repair, Tube	0.0466	0.0446	0.0231	0.0540	0.0410	906	Dishwasher	0.0392	0.0603	0.1437	0.0220	0.0134								
509	Boiler Repair, Weld	0.0368	0.0352	0.0183	0.0425	0.0323	907	Range #1	0.0492	0.0294	0.0472	0.0440	0.0432								
510	Refrigerator Repair	0.0134	0.0147	0.0131	0.0140	0.0075	908	Range #2	0.2543	0.1419	0.2438	0.2120	0.2081								
511	Range Repair	0.0143	0.0156	0.0139	0.0149	0.0079	REPLACEMENT COSTS			1.0094	1.0103	1.0094	1.0098	1.0081							
512	Roof Repair	0.0616	0.0442	0.0398	0.0627	0.0458	ALL ITEMS						1.0681	1.0537	1.0545	1.0651	1.0538				
513	Air Conditioner Repair	0.0027	0.0298	0.0042	0.0069	0.0351															
514	Floor Maint. #1, Studio	0.0002	0.0005	0.0004	0.0004	0.0006															
515	Floor Maint. #2, 1 Br.	0.0005	0.0008	0.0007	0.0005	0.0091															
516	Floor Maint. #3, 2 Br.	0.0040	0.0082	0.0070	0.0053	0.0087															
CONTRACTOR SERVICES						1.0192	1.0144	1.0139	1.0189	1.0183											

IV. Percentage Change in Real Estate Tax Sample by Borough and Source of Change, Apartments and Hotels, 1996

	% Change Due to Assessments	% Change Due to Exemptions	% Change Due to Abatements	% Change Due to Tax Rate	% Change Due to Interactions	Total % Change
APARTMENTS						
Manhattan (Below 96th St)	0.58%	0.56%	0.22%	2.33%	0.03%	3.72%
Manhattan (Above 96th St)	-1.13%	0.22%	0.26%	2.65%	-0.02%	1.98%
All Manhattan	0.44%	0.53%	0.23%	2.36%	0.02%	3.58%
Bronx	-0.81%	0.30%	0.17%	2.71%	0.01%	2.38%
Brooklyn	-1.82%	0.44%	0.18%	2.63%	-0.03%	1.40%
Queens	-0.82%	0.32%	0.29%	2.60%	-0.01%	2.38%
Staten Island	-4.10%	0.45%	0.74%	2.52%	-0.08%	-0.50%
Total	-0.21%	0.46%	0.23%	2.47%	0.01%	2.96%
HOTELS						
Hotels	0.53%	0.28%	0.00%	-1.41%	0.00%	-0.60%
Rooming Houses	3.81%	0.00%	0.01%	1.69%	-0.02%	5.50%
SROs	0.87%	0.03%	-0.08%	1.06%	0.01%	1.89%
Total	1.29%	0.13%	-0.03%	0.18%	0.00%	1.57%

Note: Totals may not add due to rounding.

V. Tax Change by Borough and Community Board, Apartments, 1996

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	All	12,071	3.6		9	269	0.8	Queens	All	5,807	2.4
	1	17	4.4		10	113	2.9		1	1,672	1.2
	2	1,093	2.3		11	268	2.8		2	772	3.0
	3	1,323	2.5		12	337	4.0		3	377	2.4
	4	1,017	4.0	Brooklyn	All	10,341	1.4		4	311	1.7
	5	347	5.8		1	1,236	6.2		5	1,086	2.4
	6	890	3.7		2	621	-4.5		6	326	2.8
	7	2,243	4.4		3	458	-3.8		7	400	2.9
	8	2,306	3.3		4	1,047	6.9		8	179	2.3
	9	619	3.4		5	202	NA		9	191	4.2
	10	458	4.1		6	869	4.3		10	80	2.8
	11	423	3.9		7	707	2.5		11	112	0.4
	12	1,324	1.0		8	673	5.5		12	143	4.9
	NA	11	NA		9	453	3.9		13	42	-3.0
			10		782	2.8	14	69	0.9		
			11		715	3.0	NA	47	NA		
			12		573	2.0	Staten Island	All	157	-0.5	
			13	182	2.0	1		100	-1.3		
			14	766	1.3	2		36	1.2		
Bronx	All	3729	2.4	15	349	2.4	NA	21	2.7		
	1	164	3.6	16	122	7.1	Citywide	All	32,105	3.0	
	2	120	2.2	17	518	3.0					
	3	102	7.7	18	61	2.4					
	4	445	1.7	NA	7	NA					
	5	482	1.8								
	6	302	2.6								
	7	803	3.6								
8	324	1.5									

VI. Expenditure Weights, Price Relatives, Percent Changes and Standard Errors, All Hotels, 1996

Spec #	Item Description	Expenditure Weights	Price Relative	% Change	Standard Error	Spec #	Item Description	Expenditure Weights	Price Relative	% Change	Standard Error
	REAL ESTATE TAXES	0.2301	1.0157	1.57%	2.8059	601	Management Fees	0.6107	1.0364	3.64%	0.6042
205	Social Security Insurance	0.0591	1.0383	3.83%	0.0000	602	Accountant Fees	0.0842	1.0393	3.93%	1.1334
206	Unemployment Insurance	0.0225	0.9783	-2.17%	0.0000	603	Attorney Fees	0.1489	1.0094	0.94%	0.6303
208	Hotel Private Health/Welfare	0.0364	1.0422	4.22%	0.0000	604	Newspaper Ads	0.0967	1.0793	7.93%	2.6421
209	Hotel Union Labor	0.3321	1.0401	4.01%	0.0000	605	Agency Fees	0.0210	1.2396	23.96%	10.7839
210	SRO Union Labor	0.0130	1.0400	4.00%	0.0000	606	Lease Forms	0.0122	1.0213	2.13%	1.6123
211	Apartment Value	0.1137	1.0325	3.25%	0.4265	607	Bill Envelopes	0.0146	1.1019	10.19%	5.6722
212	Non-Union Superintendent	0.2983	1.0410	4.10%	1.2134	608	Ledger Paper	0.0117	1.0269	2.69%	2.7277
213	Non-Union Maid	0.0000	0.0000	NA	0.0000		ADMINISTRATIVE COSTS	0.0933	1.0417	4.17%	0.5282
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	0.0370	1.0501	5.01%	0.4660
216	Non-Union Janitor/Porter	0.1249	1.0296	2.96%	0.8200						
	LABOR COSTS	0.1841	1.0368	3.68%	0.3792	801	Light Bulbs	0.0164	1.0000	0.00%	0.0000
301	Fuel Oil #2	0.6998	1.2261	22.61%	0.8564	802	Light Switch	0.0182	1.0210	2.10%	2.0628
302	Fuel Oil #4	0.0147	1.2955	29.55%	1.2225	803	Wet Mop	0.0505	1.0000	0.00%	1.2537
303	Fuel Oil #6	0.2855	1.3321	33.21%	0.4613	804	Floor Wax	0.0505	1.0068	0.68%	0.4775
	FUEL	0.0921	1.2574	25.74%	0.6139	805	Paint	0.1169	1.0137	1.37%	1.3953
401	Electricity #1, 2,500 KWH	0.0844	1.0247	2.47%	0.0000	806	Pushbroom	0.0459	1.0000	0.00%	0.0000
402	Electricity #2, 15,000 KWH	0.0871	1.0379	3.79%	0.0000	807	Detergent	0.0459	1.0126	1.26%	0.8732
403	Electricity #3, 82,000 KWH	0.2743	1.0246	2.46%	0.0000	808	Bucket	0.0519	0.9964	-0.36%	0.3720
404	Gas #1, 12,000 therms	0.0487	1.1244	12.44%	0.0000	809	Washers	0.0517	1.0000	0.00%	0.0000
405	Gas #2, 65,000 therms	0.0342	1.1962	19.62%	0.0000	810	Linens	0.3146	0.9914	-0.86%	1.9056
406	Gas #3, 214,000 therms	0.1390	1.2020	20.20%	0.0000	811	Pine Disinfectant	0.0196	1.0075	0.75%	0.4870
407	Steam #1, 1.2m lbs	0.0002	1.1718	17.18%	0.0000	812	Window/Glass Cleaner	0.0207	1.0044	0.44%	0.4569
409	Telephone	0.1942	0.9963	-0.37%	0.0000	813	Switch Plate	0.0482	1.0476	4.76%	4.9416
410	Water & Sewer	0.1379	1.0608	6.08%	2.7000	814	Duplex Receptacle	0.0441	1.0000	0.00%	0.0000
	UTILITIES	0.1706	1.0607	6.07%	0.3724	815	Toilet Seat	0.0500	1.0002	0.02%	2.0352
501	Repainting	0.2081	0.9998	-0.02%	1.1370	816	Deck Faucet	0.0549	1.0123	1.23%	1.3304
502	Plumbing, Faucet	0.0758	1.0486	4.86%	1.3436		PARTS AND SUPPLIES	0.0637	1.0032	0.32%	0.6830
503	Plumbing, Stoppage	0.0746	1.0222	2.22%	1.0405	901	Refrigerator #1	0.0196	1.0217	2.17%	0.6935
504	Elevator #1, 6 fl., 1 e.	0.0302	1.0235	2.35%	0.8201	902	Refrigerator #2	0.1046	1.0105	1.05%	0.8321
505	Elevator #2, 13 fl., 2 e.	0.0291	1.0224	2.24%	0.7430	903	Air Conditioner #1	0.0644	1.0179	1.79%	1.8161
506	Elevator #3, 19 fl., 3 e.	0.0270	1.0210	2.10%	0.7649	904	Air Conditioner #2	0.0761	1.0214	2.14%	2.1017
507	Burner Repair	0.0260	1.0088	0.88%	0.4172	907	Range #1	0.0083	1.0062	0.62%	0.6233
508	Boiler Repair, Tube	0.0264	1.0235	2.35%	1.4183	908	Range #2	0.0436	1.0065	0.65%	0.6489
509	Boiler Repair, Weld	0.0237	1.0630	6.30%	1.8426	909	Carpet	0.3324	1.0678	6.78%	4.7536
511	Range Repair	0.1521	1.0064	0.64%	2.2804	910	Dresser	0.1813	1.0000	0.00%	1.1985
512	Roof Repair	0.0219	1.0459	4.59%	2.2419	911	Mattress & Box Spring	0.1696	1.0046	0.46%	0.4527
513	Air Conditioner Repair	0.0455	1.0116	1.16%	0.0000		REPLACEMENT COSTS	0.0260	1.0280	2.80%	1.6118
514	Floor Maint. #1, Studio	0.0009	1.0041	0.41%	3.7968						
515	Floor Maint. #2, 1 Br.	0.0020	0.9837	-1.63%	3.1372						
516	Floor Maint. #3, 2 Br.	0.0181	0.9634	-3.66%	3.5862						
518	Linen/Laundry Service	0.2388	1.0000	0.00%	0.0000						
	CONTRACTOR SERVICES	0.1032	1.0114	1.14%	0.4614		ALL ITEMS	1.0000	1.0523	5.23%	0.6615

VII. Price Relative by Hotel Type, 1996

Spec #	Item Description	Hotel	RH	SRO	Spec #	Item Description	Hotel	RH	SRO
101	REAL ESTATE TAXES	0.9937	1.0550	1.0189	601	Management Fees	0.6824	0.4871	0.5768
205	Social Security Insurance	0.0777	0.0584	0.0361	602	Accountant Fees	0.0577	0.1867	0.1128
206	Unemployment Insurance	0.0201	0.0167	0.0312	603	Attorney Fees	0.1171	0.2111	0.2154
208	Hotel Private Health/Welfare	0.0559	0.0000	0.0053	604	Newspaper Ads	0.1283	0.0513	0.0644
209	Hotel Union Labor	0.5242	0.0000	0.0000	605	Agency Fees	0.0224	0.0411	0.0270
210	SRO Union Labor	0.0000	0.0000	0.0665	606	Lease Forms	0.0107	0.0197	0.0130
211	Apartment Value	0.0327	0.4153	0.1741	607	Bill Envelopes	0.0138	0.0253	0.0166
212	Non-Union Superintendent	0.1043	0.4287	0.5537	608	Ledger Paper	0.0104	0.0190	0.0125
213	Non-Union Maid	0.0000	0.0000	0.0000		ADMINISTRATIVE COSTS	1.0428	1.0411	1.0386
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	1.0501	1.0501	1.0501
216	Non-Union Janitor/Porter	0.2215	0.1159	0.1687					
	LABOR COSTS	1.0364	1.0350	1.0355	801	Light Bulbs	0.0055	0.0392	0.0325
301	Fuel Oil #2	0.9139	1.2261	0.3742	802	Light Switch	0.0062	0.0444	0.0368
302	Fuel Oil #4	0.0000	0.0000	0.1105	803	Wet Mop	0.0658	0.0238	0.0245
303	Fuel Oil #6	0.3392	0.0000	0.8120	804	Floor Wax	0.0661	0.0239	0.0246
	FUEL	1.2531	1.2261	1.2967	805	Paint	0.0536	0.3138	0.1678
401	Electricity #1, 2,500 KWH	0.0038	0.4725	0.0752	806	Pushbroom	0.0597	0.0216	0.0222
402	Electricity #2, 15,000 KWH	0.0901	0.0000	0.1576	807	Detergent	0.0604	0.0219	0.0225
403	Electricity #3, 82,000 KWH	0.3583	0.0000	0.2272	808	Bucket	0.0673	0.0244	0.0250
404	Gas #1, 12,000 therms	0.0040	0.3380	0.0132	809	Washers	0.0145	0.0859	0.1392
405	Gas #2, 65,000 therms	0.0331	0.0000	0.0973	810	Linens	0.4360	0.0918	0.1006
406	Gas #3, 214,000 therms	0.1724	0.0000	0.2710	811	Pine Disinfectant	0.0066	0.0470	0.0390
407	Steam #1, 1.2m lbs	0.0000	0.0021	0.0000	812	Window/Glass Cleaner	0.0069	0.0495	0.0411
409	Telephone	0.2612	0.0297	0.0862	813	Switch Plate	0.0656	0.0238	0.0244
410	Water & Sewer	0.1304	0.2193	0.1570	814	Duplex Receptacle	0.0574	0.0208	0.0213
	UTILITIES	1.0534	1.0615	1.0847	815	Toilet Seat	0.0140	0.0832	0.1347
501	Repainting	0.2130	0.2426	0.1666	816	Deck Faucet	0.0156	0.0924	0.1497
502	Plumbing, Faucet	0.0318	0.1842	0.1529		PARTS AND SUPPLIES	1.0013	1.0075	1.0059
503	Plumbing, Stoppage	0.0305	0.1765	0.1502	901	Refrigerator #1	0.0087	0.0440	0.0398
504	Elevator #1, 6 fl., 1 e.	0.0429	0.0000	0.0147	902	Refrigerator #2	0.0459	0.2320	0.2099
505	Elevator #2, 13 fl., 2 e.	0.0413	0.0000	0.0142	903	Air Conditioner #1	0.0974	0.0119	0.0000
506	Elevator #3, 19 fl., 3 e.	0.0384	0.0000	0.0131	904	Air Conditioner #2	0.1155	0.0141	0.0000
507	Burner Repair	0.0087	0.0275	0.0826	907	Range #1	0.0013	0.0164	0.0258
508	Boiler Repair, Tube	0.0090	0.0284	0.0853	908	Range #2	0.0069	0.0863	0.1352
509	Boiler Repair, Weld	0.0084	0.0265	0.0794	909	Carpet	0.3388	0.3931	0.3795
511	Range Repair	0.1792	0.0593	0.1386	910	Dresser	0.2129	0.1197	0.1230
512	Roof Repair	0.0348	0.0017	0.0000	911	Mattress & Box Spring	0.2000	0.1125	0.1155
513	Air Conditioner Repair	0.0386	0.0774	0.0467		REPLACEMENT COSTS	1.0273	1.0300	1.0287
514	Floor Maint. #1, Studio	0.0003	0.0020	0.0020					
515	Floor Maint. #2, 1 Br.	0.0007	0.0042	0.0042					
516	Floor Maint. #3, 2 Br.	0.0063	0.0382	0.0380					
518	Linen/Laundry Service	0.3244	0.1461	0.0301					
	CONTRACTOR SERVICES	1.0084	1.0146	1.0185		ALL ITEMS	1.0390	1.0652	1.0650

VIII. Expenditure Weights and Price Relatives, Lofts, 1996

Spec #	Item Description	Price Weights	Relative	Spec #	Item Description	Price Weights	Relative
101	REAL ESTATE TAXES	0.2492	1.0296	603	ADMINISTRATIVE COSTS, LEGAL	0.1156	1.0094
201	Payroll, Bronx, All	0.0000	1.0342	601	Management Fees	0.7931	1.0364
202	Payroll, Other, Union, Supts.	0.3029	1.0192	602	Accountant Fees	0.1570	1.0393
203	Payroll, Other, Union, Other	0.0000	1.0192	604	Newspaper Ads	0.0051	1.0793
204	Payroll, Other, Non-Union, All	0.5145	1.0368	605	Agency Fees	0.0059	1.2396
205	Social Security Insurance	0.0483	1.0178	606	Lease Forms	0.0119	1.0213
206	Unemployment Insurance	0.0113	0.9783	607	Bill Envelopes	0.0140	1.1019
207	Private Health & Welfare	0.1229	1.0640	608	Ledger Paper	0.0130	1.0269
	LABOR COSTS	0.1118	1.0332		ADMINISTRATIVE COSTS - OTHER	0.1009	1.0389
301	Fuel Oil #2	0.3405	1.2261	701	INSURANCE COSTS	0.1611	1.0501
302	Fuel Oil #4	0.5494	1.2955	801	Light Bulbs	0.0399	1.0000
303	Fuel Oil #6	0.1101	1.3321	802	Light Switch	0.0486	1.0210
	FUEL	0.0564	1.2759	803	Wet Mop	0.0430	1.0000
401	Electricity #1, 2,500 KWH	0.0151	1.0247	804	Floor Wax	0.0407	1.0068
402	Electricity #2, 15,000 KWH	0.1852	1.0379	805	Paint	0.2135	1.0137
403	Electricity #3, 82,000 KWH	0.0000	1.0246	806	Pushbroom	0.0406	1.0000
404	Gas #1, 12,000 therms	0.0056	1.1244	807	Detergent	0.0344	1.0126
405	Gas #2, 65,000 therms	0.0559	1.1962	808	Bucket	0.0427	0.9964
406	Gas #3, 214,000 therms	0.1399	1.2020	809	Washers	0.1039	1.0000
407	Steam #1, 1.2m lbs	0.0156	1.1718	811	Pine Disinfectant	0.0502	1.0075
408	Steam #2, 2.6m lbs	0.0057	1.1962	812	Window/Glass Cleaner	0.0538	1.0044
409	Telephone	0.0133	0.9963	813	Switch Plate	0.0408	1.0476
410	Water & Sewer	0.5636	1.0474	814	Duplex Receptacle	0.0368	1.0000
	UTILITIES	0.0779	1.0778	815	Toilet Seat	0.1006	1.0002
501	Repainting	0.4190	0.9998	816	Deck Faucet	0.1104	1.0123
502	Plumbing, Faucet	0.1346	1.0486		PARTS AND SUPPLIES	0.0249	1.0084
503	Plumbing, Stoppage	0.1250	1.0222	901	Refrigerator #1	0.0890	1.0217
504	Elevator #1, 6 fl., 1 e.	0.0494	1.0235	902	Refrigerator #2	0.4776	1.0105
505	Elevator #2, 13 fl., 2 e.	0.0347	1.0224	903	Air Conditioner #1	0.0176	1.0179
506	Elevator #3, 19 fl., 3 e.	0.0196	1.0210	904	Air Conditioner #2	0.0218	1.0214
507	Burner Repair	0.0398	1.0088	905	Floor Runner	0.0865	1.0000
508	Boiler Repair, Tube	0.0450	1.0235	906	Dishwasher	0.0454	1.0047
509	Boiler Repair, Weld	0.0343	1.0630	907	Range #1	0.0429	1.0062
510	Refrigerator Repair	0.0136	1.0180	908	Range #2	0.2192	1.0065
511	Range Repair	0.0145	1.0064		REPLACEMENT COSTS	0.0205	1.0097
512	Roof Repair	0.0544	1.0459				
513	Air Conditioner Repair	0.0099	1.0116				
514	Floor Maint. #1, Studio	0.0003	1.0041				
515	Floor Maint. #2, 1 Br.	0.0006	0.9837				
516	Floor Maint. #3, 2 Br.	0.0053	0.9634				
	CONTRACTOR SERVICES	0.0817	1.0179		ALL ITEMS	1.0000	1.0477