

# **SUBMISSION TO THE RENT GUIDELINES BOARD IN CONNECTION WITH RGB ORDER NUMBER 54**

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## *Introduction*

As I have testified in prior years, the Rent Guidelines Board (“RGB”) is tasked with two fundamental responsibilities: To review economic conditions within the city’s rental markets and to establish rent guidelines that limit the effects of the ongoing housing shortage on rent burdens. As this and prior submissions have shown, while there has been a prodigious expansion of research and analysis over the past few decades, the Board has fallen short in three specific matters in need of review. As will further be shown, notwithstanding the fact that Board decisions have gradually begun to mitigate the grossly excessive guidelines during the six year period from 2009 to 2014, the effects of those excessive guidelines continue to overcompensate owners and unnecessarily burden tenants.

The consequence of analytical and policy errors here is serious. The numbers of homeless persons, the size of rent burdens and unemployment levels remain high by historical standards. (I will let others present more precise data on tenant conditions.) Any rent increases which go beyond keeping owners whole in terms of preserving historically stable levels of net operating income places an unwarranted and recklessly applied burden on stabilized tenants.

In addition to examining areas in need of further study, this submission examines the impact of the Board’s decisions on owner net operating incomes since 1990. It updates similar submissions presented over the past seven years. It addresses the following question: Have the increases authorized by the RGB over time along with vacancy allowances been sufficient to preserve owner net operating income (“NOI”)?

The central feature of this submission is a table of Annualized Commensurate Adjustments (the “ACA Table”) which describes the rent increases needed to ensure owners have been fully compensated for operating cost increases since 1990 (the first year the RGB received income and expense data from the Department of Finance). Factored into those calculations are adjustments which also ensure owners’ NOI is protected against the effects of inflation.

The ACA table compares increases in operating costs and the effects of inflation on NOI with the guidelines adopted by the RGB, including vacancy allowances (promulgated each year by the RGB until 1997 and by statutory formula until 2019 when eliminated by the HSTPA discussed below). The comparison isolates and removes the effects of rising owner income through statutory deregulation, major capital improvement increases, individual apartment increases and other sources of increasing income. The purpose is to determine if the guidelines adopted by the RGB, along with regular vacancy allowances, have been sufficient to “keep owners whole” or

whether they have been insufficient or excessive in achieving that goal. It was purposefully constructed to eliminate the influence of statutory changes on rent levels and focus on the impact of the decisions of the Board alone. In that regard, any loss of income under the Housing Stability and Tenant Protection Act of 2019 remains irrelevant insofar as the main changes made – eliminating high rent vacancy deregulation and lowering MCI increases – were never factored into the chart to begin with.

It is, I believe, a conservative approach, because it treats the effects of past statutory changes (e.g. high rent deregulation and various improvement increases) as serving other legislative purposes like gradual deregulation or incentivizing improvements to the housing stock.

The consequence of isolating these statutory rent adjustments from the present analysis is illustrated by comparing increases in actual NOI as identified in the RGB staff's 2022 income and expense analysis (a 46.6% increase in NOI from 1990 to 2020 after adjusting for inflation) with the growth in NOI that can be attributed solely to guideline adjustments and vacancy allowances - which results in a lower figure of approximately 32% over what was needed to keep RGB influence on NOI neutral over time. That is, had the RGB adopted annual guidelines over the 30 year period since 1990 that were cumulatively 32% lower, it could be argued that the RGB held a neutral course with respect to preserving the inflation adjusted value of NOI over time.

The policy analysis herein is my own and not that of the RGB staff or any other public agency, though the RGB staff has checked and updated the data included in the ACA Table

## ***Summary of Findings***

### *Research Concerns*

As I have urged in prior submissions, in order to better refine and clarify conditions within the rental housing industry and to generate more public confidence in the rent setting process, the Board must take a closer look at three variables:

- 1) the relative aging of the housing stock and the effect this has on operating cost to rent ratios; and
- 2) actual operating cost to rent ratios from income and expense data based upon updated audits of tax filings to more precisely identify areas of misreporting; and
- 3) the general profitability of stabilized buildings as an investment as determined by relative changes in sales prices over time, including comparisons with rising values of multi-family property in unregulated urban housing markets.

### *Substantive Impact of RGB Orders*

As for the substantive impact of the RGB orders over time, **based on current data it is clear that had the Board authorized cumulative rent increases of 181.70% over the thirty one year period since 1990, owners would have been kept “whole” for both operating cost increases and the effect of inflation on net incomes, and rent stabilized tenants would have been protected against excessive and unwarranted rent increases. (See ACA Table, 2<sup>nd</sup> to last column “Necessary Rent Increases”)**

**In fact, the Board authorized rent increases of 213.91% over this period. (See ACA Table, last column - “Impact of RGB Rent Index, Cumulative”)**

While rent guidelines have been lower over the past seven years, they have failed to fully ameliorate excesses accumulated from prior years, contributing to a continuation of crushing rent burdens, displacement and homelessness.

Long term windfalls for the owners of stabilized buildings overwhelm the significance of any short term economic changes facing owners this year, including cost increases reported in the annual price index of operating costs.

### *The Mandate of the RGB*

**When considered as a whole, the Declaration of Emergency and mandated considerations compel the Board to attempt to construct or to simulate normal market rents where abnormal conditions prevail. The Board’s job is to even the playing field.**

This is no easy task – but the Board has plenty of tools at hand.

Certainly a review of changes in operating costs is essential. As costs go up, so generally, do rents. The RGB has recognized that the two major instruments available for measuring costs have serious limitations. The first of these – the income and expense (I&E) data available from the Department of Finance – suffers from a lag in reporting of over one year.<sup>1</sup> The second instrument, the annual price index of operating costs (“PIOC”), is a measure of hypothetical market basket of goods which has (until changes about seven years ago), substantially overstated actual operating cost changes (as evidenced by the more reliable I&E data).<sup>2</sup> Moreover, because it is viewed in isolation, without current data on owner income, the PIOC has chronically

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<sup>1</sup> Some criticism has also been raised that the I&E data does not cover smaller buildings (with less than 11 units). That is a valid concern regarding cross-sectional findings but probably of limited or no impact when examining longitudinal changes which we are concerned with here. There is little reason to assume that the rate of cost changes in small vs large buildings is significantly different in any given year.

<sup>2</sup> See *Comparing the PIOC and the RGB Income and Expense Study*, Hudson, 3/21/14. “In the second half [of the period from 1992 – 2012] the estimated rate for the PIOC is 6.2% annually and the I&E is 4.3%.”

presented a misleading portrait of the overall health of the real estate industry.

A review of cost changes is incomplete without a review of changes in rents. For that we have the income data from the Department of Finance (which again suffers from a time lag) as well as the RGB's own rent index – a mathematical projection which factors in the prevalence of one and two year leases, vacancy allowances and the applicable rent guidelines. Unfortunately, the rent index has never been formally used to counteract the one sided picture provided by the PIOC. I have attempted to address that in the past several years by presenting the Board with the ACA Table which seeks to compare what owners have needed to be “kept whole” and what the RGB has authorized in actual rent increases. An update on that analysis is presented below.

### *The O&M to Rent/Income Ratio*

The central and clearly the most important product of all the measures presented to the Board is the operating cost to rent or income ratio (the “O&M to rent ratio”) and changes in that ratio over time. If the O&M to rent ratio remains flat owners have been “kept whole” for operating cost changes. If it falls, owners will see a gain in net operating income. If it rises, operating costs will eat up a larger portion of each rent dollar collected. Absent other factors, a stable O&M to rent ratio is an indication that the Board is holding a steady course. If that course permits **cost push** inflationary factors – like oil, labor or insurance costs – to be recaptured in rent increases, the Board is simulating normal market conditions. But if that course permits the City's exceptional **demand pull** inflationary pressures to force rents up – that is rent increases driven by an abnormal imbalance between supply and demand – then the Board is departing from its mission to establish rents that might otherwise prevail in a normal market, a market where greater housing opportunities exist as measured by higher vacancy rates.

Before turning to the basic trends in the O&M to rent ratio, there are two other factors the Board should consider when evaluating whether the prevailing ratio is too high or too low.

The first is the relative age of the housing stock. As buildings age operating costs will generally increase relative to rents.<sup>3</sup> The City's housing stock has clearly aged. We have no precise numbers on the median age of rent stabilized buildings, but based upon HVS data we do know that in 1981 80.3% of the rent stabilized housing stock was over twenty years old.<sup>4</sup> In 2014 92.7% of the stabilized stock was over forty years old.<sup>5</sup> One can easily conclude from this that new construction has not been sufficient to keep the average age of the housing stock from rising. In a normal market, this would mean that the O&M to rent ratio would have crept forward from

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<sup>3</sup>This is a widely recognized phenomenon. See e.g. *Determinants of Operating Costs of Multifamily Rental Housing*, Jack Goodman, Joint Center for Housing Studies, Harvard University July 2004, <http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/w04-7.pdf>

<sup>4</sup> NYC HVS 1981, Series IA, Table 16.

<sup>5</sup> Calculations derived from NYC HVS 2014, Series IA, Table 16.

where it was thirty or forty years ago.<sup>6</sup>

**This is one of the three areas where the RGB's analysis is in need of further refinement. The Board should examine the relationship between relative operating cost ratios and building age, and then make a more precise determination of how much the stabilized stock has aged since 1969 (the first year of stabilization) and since 1990 (the first year of access to operating cost data through the Department of Finance).**

The second factor is the impact of a recession on rents in normal markets. If household incomes are flat or falling, rents generally dip or sputter along until the economy picks up. This was evident during the Great Recession, when the national median asking rent in the first quarter of 2009 (\$723) actually exceeded the median asking rent four years later -- in the first quarter of 2013 (\$718).<sup>7</sup> If operating costs are rising net operating incomes will generally fall during an economic downturn. Consequently a decline in net operating income during the recent economic downturn is neither surprising nor something the Board should seek to arrest. Any such temporary decline would simply parallel what happens in normal rental markets.

**In sum, as a structural matter, in normal markets O&M to rent ratios will gradually rise with the relative age of the housing stock and, as a cyclical matter, a recession will limit rent increases or even cause a decline in rents – and this typically results in a rising O&M to rent ratio (i.e. declining net operating incomes).**

#### *How the O&M Ratio Has Changed Over the Years*

Based on a 1993 RGB staff study, which constructed an estimate of a mean O&M to Rent/Income ratio for the pre-war stock derived from extensive work by George Sternlieb in 1967, the true O&M to Income ratio estimate (Sternlieb combined rent and income) fell into a range from .65 to .70. at the outset of stabilization. The estimated mean ratio for the post-war (1947 or later) stock was .55 based upon contract rents.<sup>8</sup> Given the relative portion of the pre and post war units, the overall O&M to rent ratio at the outset of rent stabilization was assumed to be .62 (conservatively applying the lower of the range [.65] for the pre-war units which now constitute about three quarters of the stabilized stock).

In sum, using the best evidence available (and applying conservative assumptions) we can assume that at the time rent stabilization was first adopted in 1969 the average landlord in New

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<sup>6</sup>With the aging of the housing stock this ratio should have gradually risen over the years. At this juncture an average ratio of .65 to .68 would neither be surprising nor troubling.

<sup>7</sup> U.S. Census Bureau, Housing Vacancies and Homeownership, Table 11A - <http://www.census.gov/housing/hvs/data/histtabs.html>

<sup>8</sup> These points are summarized in *Introduction to the NYC RGB*, Appendix K, Staff Memo dated May 13, 1999.

York City was spending about 62 cents of rent and income collected on operating costs, keeping about 38 cents as net operating income (for capital improvements, financing costs and operating profits).

With access to the Department of Finance I&E data we can more reliably gauge how the O&M ratio has changed over the past two decades. In this year's I&E report, the RGB staff found that the O&M ratio in 2020 was 60.2%. The ratio witnessed a general decline since 2008 when it was 64.3%.

In this analysis I have applied what is referred to as the "audit adjusted" O&M ratios. Those adjustments are derived from audits conducted by the city's Department of Finance on 46 buildings in 1992. According to the Board's 1995 Summary of Research (at p. 34):

The auditors ultimately found that owners overstated O&M costs in RPIE filings by about 8%. Costs tended to be less accurately recorded in small (11-19 units) and medium (20-99 units) sized buildings (overstated by 13% and 9% respectively). Expenses in large (100+ units) buildings appeared to be more accurate (overstated on average by only 2%), but remain somewhat inconclusive since several owners of large stabilized properties refused to cooperate with Finance's assessors. Expense reductions were concentrated in three categories: maintenance, administration, and miscellaneous costs. Maintenance had to be lowered by an average of 11% for all buildings, while administration and miscellaneous costs were respectively trimmed by approximately one-quarter (25%) and one-third (37%).

Those audits are now thirty years old. They are a vital part of understanding true operating cost profiles but long ago lost the confidence of both owners and tenants due to the age of the study and the limited size of the sample. **There is no good reason why the RGB cannot call upon the Department of Finance to undertake a new set of audits or to call upon DHCR to issue subpoenas on a select sample of buildings to check and update operating cost profiles. This would greatly assist with the adoption of more reliable adjustments in the future.**

The time for this update is long overdue.

### *Net Operating Income*

Looking at the O&M ratio from the income side and considering the factors which continue to fuel owner overcompensation, during the heart of the recession, when nearly every other investment in the nation was in decline, rent stabilized housing in New York City witnessed a significant increase in net operating income – rising from 35.7% of each rent dollar collected in 2008 to 39.4% in 2014. That rise was unconscionable and unjustified.

Notwithstanding a new administration which took a more honest look at the data and which authorized far more reasonable rent adjustments over the past seven years, net operating income

actually continued to rise to 41.8% in 2016 dropping back only to 39.8% in 2020.

**This is clear and unequivocal evidence that owners have continued to do very well – riding on the substantial gains made during the very hard years of the Great Recession and beyond.**

Despite an aging housing stock and sharply declining tenant incomes which should have caused the O&M ratio to rise and net operating incomes to decline during those critical years, the actions of the RGB and the operation of various statutory deregulation provisions sent the ratio sharply down and net operating incomes significantly up. It is therefore completely unsurprising that the RGB staff now reports that owner net operating incomes are 46.6% higher (in constant 2020 dollars), than in 1990. (2022 I&E Report at page 11)

With thirty one years of data on actual income and expenses, we can answer the question: “What rent increases were necessary to keep owners ‘whole’ in terms of rising operating costs and the effects of inflation on net operating income?” Using the RGB’s rent index, we can compare this answer with what the RGB actually authorized in rent increases.

#### *A Fair Measure of the Impact of RGB Guidelines*

Why can’t we simply compare rent increases with operating cost increases?

To compare rent increases with operating cost increases is to implicitly suggest that rents should rise at a comparable rate to operating costs. But if operating costs are rising faster than inflation, that approach would cause the net operating income portion of rent to rise at a higher rate than inflation. There is no reason why owner net operating incomes should rise faster than inflation. That approach would result in unwarranted windfall profits.

It is clear that operating costs have risen faster than inflation over the past 31 years (since the RGB first gained access to I&E data). In fact, according to the Board's table 7 (from last year's explanatory statement for Order #53) operating costs have risen 209% (\$1,143/\$370 - unaudited and (\$1,050/\$340 - audited) since 1990. Over the same period (3/90 to 3/21) the CPI has risen only 105.81%. **In short, operating costs have risen about twice as fast as the CPI. Had rent increases been pegged to the rate of change in operating costs alone, owners would have more than doubled increases to their net operating incomes resulting in a massive and unwarranted windfall. Owners have repeatedly obfuscated this basic economic fact by complaining in several forums – without clarification or justification – that they have been shortchanged by rent adjustments which failed to keep up with operating cost changes. This is a deliberate and outrageous deception which should not be tolerated by any responsible policymaker - nor by any ethical journalist.**

To find out what kind of RGB increase is needed to keep owners whole, we need to multiply the percentage increase for operating costs by the O&M ratio. The product of that calculation may

then be added to the annual CPI multiplied by the NOI portion of rent collections. Thus, if operating costs rose by 5% that figure could be multiplied by the O&M ratio (say 60%) resulting in product of 3% and this is the amount needed to increase rents to cover operating costs while keeping NOI constant in nominal dollars. Then, we could add the product of the CPI times the NOI ratio (e.g. 2% times 40%) to produce the amount needed to keep NOI whole for inflation (here .8%). Adding the two products gives us the overall rent increase needed to keep owners whole for changes in operating costs and to protect income from inflation. In this example the total would be a 3.8%. This is an annualized version of the RGB staff's commensurate rent formula which I have referred to as an "annualized commensurate increase".

These calculations have been done for each year since 1990. The most recent four years have been updated and checked by the RGB staff to ensure consistency with RGB generated data points.

A table of these calculations is attached.

#### *Isolating the Effects of the RGB Orders on Rent Increases from Other Income Sources*

The utilization of the RGB staff rent index is what is most critical here. That index is a projection constructed from the actual RGB guidelines, the prevalence of one and two year leases and the number of vacancies each year. It is as close to a pure reflection of the intended impact of the RGB guidelines on rents as one can get. It ignores changes in income from unregulated and commercial units, and from preferential rents (rents charged below legal maximums).

Doing these calculations results in a 181.70%% cumulative increase in the annualized commensurate since 1990 and a 213.91% cumulative increase in the RGB rent index over the same period. (These percentages are obtained by deducting the base of 100 from the bottom figures in each of the two last columns on the ACA Table.)

**This means that the increases authorized by the RGB since 1990 (starting in 1991) exceeded the amounts needed to keep owners whole in all respects by over 32% cumulatively.**

As previously noted, this figure is predictably less than the 46.6% growth in the inflation adjusted value of net operating income found by the RGB staff. One would expect actual owner income to be rising relative to the increases authorized by the RGB because of the increasing prevalence (until mid 2019) of unregulated "market rate" apartments in the stock and major capital improvement increases.

There are, as always, some complications. We know, for example, that the number of preferential rents and collection and vacancy losses have changed over time. Consequently, not all rent increases authorized by the RGB are collected. We might also add that the presence of illegally inflated rents is also a significant factor which is not quantified in our comparisons. This should not change the analysis here, however, because we are asking and answering the



simple question: All other things being equal, has the RGB authorized rent increases that are sufficient to cover changes in operating costs and preserve net operating income against the effects of inflation?

**We can safely answer that increases in regulated rents authorized by the RGB have greatly exceeded both operating costs and increases needed to protect net operating income from the effects of inflation.**

### *Owner Profits*

The issue has occasionally been raised before the RGB that analysis of O&M ratios and net operating incomes fail to accurately assess actual owner profits. That is absolutely true. The RGB lacks both the jurisdiction and resources to reliably examine the real return owners see on their investments. Notably, the Rent Stabilization Law does not speak about “profits.” There is a good reason for this. Simply put, the Board does not control profit levels. Any such attempt would result in an intractable circularity problem: rents rise, property values climb, investors must spend more to purchase properties, rents must rise again to maintain the same relative return on investment. Moreover the RGB does not control purchase prices, down payments or equity levels – all central variables to long term profits.

That does not mean, however, that the RGB lacks resources to intelligently gauge how profitability has changed since the stabilization system began in 1969. The simplest (and arguably the best) measure of changing profitability over time is found in sales prices. In a survey of real estate transactions for rental buildings in New York City covering the period from 1976 through 1993, median sales prices increased over 400% while the national inflation rate increased at less than half that rate. See *Sales Price Data, Rent Stabilized Housing in New York City: A Summary of Rent Guidelines Board Research*, 1993, p. 112. That was a limited study which – after 28 years needs to be updated and expanded.

The RGB should analyze changes in sales prices for a statistically significant sample of buildings with rent stabilized units since 1969. The results should then be compared to sales price changes for rental buildings nationally as well as to the CPI. That would add an important additional reference point from which to measure the impact of both the rent stabilization system and the RGB’s own orders on the economic viability of regulated buildings. It would also perform a valuable service for legislators and other policy makers. **The only way to examine the total impact of the general regulatory environment on property values is to look at appreciated values over time.**

The RGB is presently faced with a judicial challenge (now before the United States Court of Appeals for the 2<sup>nd</sup> Circuit). In that appeal the appellants allege that their property has been taken because of the impact of the rent stabilization laws on property values. They rather myopically fail to consider the impact of the overall regulatory environment in which owners of rent stabilized buildings operate. The best way to examine that impact is to consider appreciation

over time and compare it to other investments, including the appreciated value of multi-family properties nationwide.

One final point on these data shortcomings: There is only one group that has the power to provide precise data on profits and that is the owners themselves. The chronic failure of the real estate industry to disclose actual profit levels or to voluntarily provide income and expense data should not be lightly dismissed. They have utterly failed to produce key evidence under their primary control. As a result, all inferences with respect to the reliability of the limited evidence and arguments they do produce should be drawn against them. What the RGB typically witnesses when owners do present evidence of losses is selective cherry picking of buildings and data.

### *Conclusion*

As I have consistently testified over the years, I do not believe it is the role of the RGB to make every apartment affordable for every tenant. The RGB is not a welfare agency. If apartments become unaffordable because operating costs are truly driving prices up, rent increases may be a necessary evil to sustain the housing stock and to ensure a fair return for owners. But if apartments are becoming unaffordable because unwarranted rent increases are simply transferring wealth from the City's tenants to its owners – resulting in excessive profits for owners – then it is indefensible. It is clear that the RGB has continued to overcompensate the City's landlords while tenants face unwarranted and continuing hardships.

For all of the foregoing reasons, this Board must act without hesitation to provide relief where prior guidelines have inflicted so much unnecessary harm.

“Table of Calculations: Annualized Commensurate Adjustments 1991-2021,” by Tim Collins

Year	% Increase in Cost	Audited Cost-to- income Ratio	COST*O&M Ratio	CPI Increase	NOI Ratio	NOI*CPI	(Cost*O&M Ratio) + (NOI*CPI)	RGB Rent Index (renewal guidelines + vacancy increases)	“Necessary” Rent Increases, Cumulative (starts at 100)	Impact of RGB Rent Index, Cumulative (starts at 100)
									100	100
1991	3.4%	0.63	0.02134	4.55%	0.37	0.01694	0.03828	4.10%	103.83	104.10
1992	4.2%	0.63	0.02645	3.59%	0.37	0.01329	0.03975	3.73%	107.95	107.97
1993	2.1%	0.62	0.01311	3.00%	0.38	0.01127	0.02438	3.07%	110.59	111.28
1994	2.5%	0.61	0.01516	2.39%	0.39	0.00942	0.02459	2.88%	113.31	114.49
1995	2.5%	0.59	0.01483	2.53%	0.41	0.01028	0.02512	3.07%	116.15	118.00
1996	5.4%	0.60	0.03249	2.90%	0.40	0.01156	0.04406	4.51%	121.27	123.32
1997	1.9%	0.58	0.01113	2.34%	0.42	0.00979	0.02091	5.21%	123.80	129.74
1998	1.5%	0.56	0.00862	1.64%	0.44	0.00724	0.01586	3.68%	125.77	134.51
1999	3.5%	0.55	0.01904	1.96%	0.45	0.00886	0.02790	3.76%	129.28	139.57
2000	8.4%	0.56	0.04751	3.11%	0.44	0.01360	0.06111	4.19%	137.18	145.42
2001	4.8%	0.56	0.02688	2.52%	0.44	0.01103	0.03791	4.97%	142.38	152.65
2002	6.9%	0.57	0.03957	2.57%	0.43	0.01094	0.05051	4.48%	149.57	159.49
2003	12.5%	0.62	0.07764	3.07%	0.38	0.01163	0.08927	4.13%	162.92	166.08
2004*	7.3%	0.62	0.04525	3.54%	0.38	0.01345	0.05870	5.47%	172.48	175.18
2005	6.0%	0.65	0.03925	3.86%	0.35	0.01354	0.05279	4.61%	181.59	183.26
2006	4.1%	0.63	0.02588	3.76%	0.37	0.01380	0.03969	4.26%	188.80	191.06
2007	5.2%	0.62	0.03213	2.83%	0.38	0.01066	0.04279	4.18%	196.88	199.05
2008	6.4%	0.64	0.04129	3.90%	0.36	0.01392	0.05521	4.68%	207.75	208.36
2009	0.1%	0.63	0.00051	0.44%	0.37	0.00164	0.00215	7.46%	208.19	223.89
2010	0.9%	0.62	0.00557	1.71%	0.38	0.00649	0.01206	5.21%	210.70	235.56
2011	4.1%	0.62	0.02501	2.85%	0.38	0.01089	0.03590	3.68%	218.27	244.24
2012	3.2%	0.60	0.01935	1.97%	0.40	0.00777	0.02712	4.39%	224.19	254.95
2013	5.0%	0.61	0.03026	1.68%	0.39	0.00660	0.03686	4.12%	232.45	265.45
2014	5.6%	0.61	0.03380	1.32%	0.39	0.00521	0.03901	4.06%	241.52	276.24
2015	1.1%	0.59	0.00618	0.13%	0.41	0.00052	0.00670	2.19%	243.14	282.29
2016	2.4%	0.58	0.01369	1.08%	0.42	0.00450	0.01819	1.64%	247.56	286.93
2017	4.5%	0.59	0.02684	1.96%	0.41	0.00797	0.03480	1.92%	256.18	292.45
2018	5.8%	0.61	0.03534	1.91%	0.39	0.00753	0.04287	2.43%	267.16	299.55
2019	3.3%	0.60	0.02015	1.65%	0.40	0.00654	0.02669	2.46%	274.29	306.92
2020	-2.8%	0.60	-0.01701	1.71%	0.40	0.00681	-0.01020	1.50%	271.49	311.53
2021**	3.9%	0.60	0.02343	3.57%	0.40	0.01416	0.03759	0.76%	281.70	313.91

\*Estimate for percentage increase in costs

\*\* Estimates in the percentage increase in cost, audited cost-to-income ratio and NOI ratio

Source: Annual RGB Income and Expense Studies, U.S. Bureau of Labor Statistics, and annual RGB Explanatory Statements.