Privately Owned Public Space Attached to Office Buildings in Manhattan:

Economic and Urban Perspectives of Incentive Zoning

by

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Submitted to the Department of Architecture
in Partial Fulfillment of the Requirements for the Degrees of
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& Master of Science in Architecture Studies

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Abstract

This thesis examines the Incentive Zoning Policy of New York City from economic and urban perspectives. In the first part, it evaluates empirically the economic contribution of privately owned public space to the value of the office buildings to which they are attached. An economic model is postulated to predict the equilibrium rental behavior as a function of a series of independent variables, including a dummy variable representing the existence and the quality of privately owned public spaces.

The model is tested against disaggregated cross-sectional data from a set of 475 office buildings in downtown and midtown Manhattan. Results confirm a strong economic influence of privately owned public spaces on office rents. Office buildings with favorable privately owned public spaces are predicted to extract $5.05/sqft more in rent annually, a premium of 12.3% over the $41.03/sqft average annual rate. Based on the rating system defined by Jerold Kayden, on average, for each level increase of quality, there is $1.36/sqft of value (a premium of 3.3%) added to the annual rent, which can further be translated into a premium in the property value when properties are sold.

The second part of the thesis addresses the possible impact that this result may bring to the different players in the process of urban development, including developers, owners, tenants, urban designers, and city planners. In particular, the thesis explores how the economic benefit illustrated by this research might change the often reluctant attitude of the private sector regarding the maintenance of these privately owned public spaces. Further investigation also reflects on the lessons learned from the more than 40 years history of incentive zoning practice in New York City. Potentials issues for further study are also put forward.

Thesis Supervisors: John de Monchaux; Henry Pollakowski
Titles: Professor of Architecture and Planning; Urban Economist and Visiting Scholar

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I can't express how grateful I am to my family members without whose support I wouldn't have been able to successfully complete the dual Master's education at MIT.

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1. Background Information

1.1.Inspiration from Kayden's Book

The author's particular interest in the privately owned public space in Manhattan was stimulated by a latest research that has drawn broad attention in the academia as well as in the real world urban planning practice.

In 2000, Jerold Kayden, Professor of Urban Planning from the Graduate School of Design at Harvard University published a book together with the New York City Department of City Planning and the Municipal Art Society of New York, entitled "*Privately Owned Public Space: The New York City Experience*". Kayden, a scholar, lawyer/planner, and urban enthusiast, believes that law can significantly affect the design of the built environment for the benefit of the society.

As a testing of the utility of law, Kayden [15] investigated New York City's 503 privately owned public spaces attached to 320 buildings, examining whether the public receives the full benefits promised by the exercise of the almost 40 years of zoning law. He summarized physical qualities, required amenities and operating standards of each one of these privately owned public spaces and labeled them into five categories, namely,

Destination Space, Neighborhood Space, Hiatus Space, Circulation Space, and Marginal Space.

Kayden's book disseminates foundational knowledge essential to understand and use a public benefit to which citizens are legally entitled. These ultimate beneficiaries of the trade of floor area bonuses and other zoning incentives for public spaces have not always enjoyed the full fruits of those trades.

Kayden's research also provides a sound basis for analysis and development of policies for better enforcement and upgrading of the existing spaces. His effort serves as a reminder of the need to secure and burnish urban assets already in place, and assets to be procured in the future. Owners of these properties can as well get to know clearly what their obligations are.

In the following sections of this chapter, more background information will be introduced. Unless otherwise noticed, the resource of the information is the research in Kayden's book.

1.2.Definition of Privately Owned Public Space

Privately owned public space was established by the City of New York in 1961 as a replacement for its original resolution of 1916. "Through a legal innovation subsequently known as incentive zoning, the City offered floor area bonuses and other zoning

concessions to office and residential developers if they would agree to provide plazas, arcades, atriums, and other outdoor and indoor spaces, governed by design standards articulated by the Zoning Resolution and its administration, that would be accessible to, and usable by, the public for as long as the building existed. Private ownership would reside with the developer and successor owners of the property, access and use with members of the public, hence the appellation 'privately owned public space'."[1] It is an innovative approach in the utilization of public-private partnerships to address urban concerns.

While approximately 82 acres of public space have been created as a product of this incentive, not all of them were worth of the bargain. Some were badly designed or sited; others have been wrongfully restricted by the building owners to discourage public use. Many originally valuable ones have been poorly maintained.

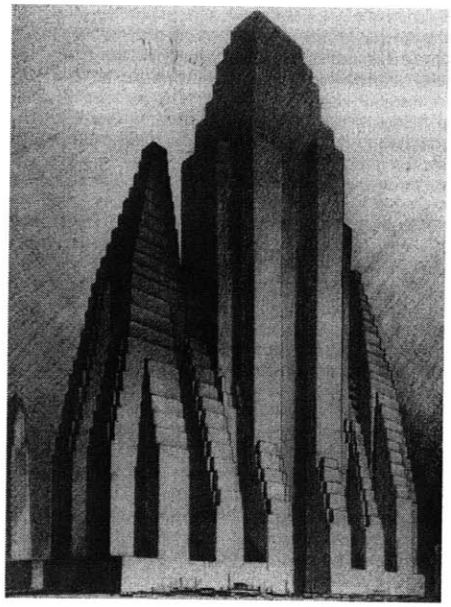
1.3.Origination of the Privately Owned Public Space

In 1916, New York City started to utilize zoning as a major vehicle to create a sense of openness, also known as "light and air", at street level[2]. The height rules combined with real estate economics, tenant requirements, and construction constraints resulted in a

[1] Kayden, p.1.
[2] Kayden, p.7.

dominant, "wedding cake" or "ziggurat" building typology. As developers usually built to the street line to maximize their building bulks, open space at street level was sacrificed.

In response to this, the 1961 Zoning Resolution established a maximum bulk limitation, namely the floor area ratio (FAR), defined as the total building floor area on a zoning lot divided by the area of the zoning lot.[3]. The new resolution was intended to assure that public streets and all portions of buildings fronting on streets have access to light and air, and to provide a general feeling of openness at street level. The height and setback controls of the new Zoning Resolution brought about a remarkable modification of the prevalent wedding cake typology of earlier years.



Hugh Ferriss, American, 1889-1962. Study for Maximum Mass Permitted by the 1916 New York Zoning Law, stage 3, 1922. Source: Kayden, p. 9.

Also, the 1961 Zoning Resolution formally inaugurated the privately owned public space policy, which encompassed two significant innovations. "First, the City would deploy its zoning power affirmatively rather than negatively, encouraging rather than requiring, private developers to act in a manner desired by the public sector, an approach that would become known as 'incentive zoning'. Second, the City introduced a new type of space:

[3] Kayden, p.10. Studies of post World War II office buildings showed an average FAR of 15 in Manhattan's central business district.

privately owned public space, located on private property yet, unlike zoning's yards, courts, and other open spaces, physically accessible to the public-at-large."[4]

1.4.Rationale and Mechanism of Incentive Zoning

The City's Zoning Resolution employed several legal approaches to obtain privately owned public space, among which the most dominant one was incentive zoning. It "allowed a private developer to construct a building larger or different from that otherwise permitted by the zoning if, in return, the developer provided on its lot a City-approved privately owned public space."[5] Different types of privately owned public space have their own bonus multiplier, normally ranging from 2 to 14 bonus square feet for every square foot of public space provided.

"The broad social rationale for this exchange is that the public is better off in a physical environment replete with public spaces and bigger buildings than in one with fewer public spaces and smaller buildings. The crisper rationale is that public space is density-ameliorating, in that it more than counteracts whatever negative impacts, such as greater street and sidewalk congestion and loss of light and air, that may be associated with larger buildings."[6]

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[4] Kayden, p.11.
[5] Kayden, p.22.
[6] Kayden, p.22.

"Depending on the type of the privately owned public space, legally binding approval of the incentive-for-public space trade has been rendered through an 'as-of-right', 'discretionary', or 'certification' administrative process. The Zoning Resolution expressly assigns the type of process to be utilized, generally reserving the discretionary process for public spaces thought to require the highest level of case-by-case review, the certification process for spaces requiring a middle level of review, and the 'as-of-right' process for spaces requiring minimal review."[7]

Operation of law has been playing a significant role in designing the City's privately owned public spaces. "The standards have changed over time, reflecting an evolution in thinking about what makes public space work or fail, and how demanding and precise legal standards need to be in order to achieve successful outcomes."[8]

1.5.Economic Validity from Developer's Standpoint

The result of the incentive zoning practice illustrated that "the provision of plazas and arcades in return for bonus floor area proved irresistible to most office and residential developers"[9]. According to Kayden's book, of the 95 commercial office buildings constructed between 1966 and 1975, 67 buildings, or 70% of the total, provided plazas. In the majority of such cases, the developers earned an FAR bonus close or equal to the

[7] Kayden, p.23.
[8] Kayden, p.25.
[9] Kayden, p.12.

maximum 20% cap.[10] The following points as summarized by Kayden might help to explain the extreme popularity of the trade off.

First of all, "the financial rewards generated by the floor area bonus were disproportionately large in relation to the cost of providing the plaza or arcade."[11] The author did not have access to the cost of construction data, and thus could not conduct a detailed financial calculation. However, one study estimated that the value of the bonus floor area amounts to 48 times the cost of the plaza[12]. Should that be true, it was certainly a very attractive deal from developers' perspective.

Secondly, as pointed out by Kayden, "the design and administrative requirements for obtaining the bonus were relatively undemanding.... Since the plaza and arcade bonuses were "as-of-right", ...the City Planning Commission had no role in reviewing the proposed plaza or arcade, and its discretion, approving or denying the developer's application for the zoning bonus."[13] Therefore, a qualifying plaza could be as rough as a plain, concrete surface. The lack of articulated standards gave developers much room to maneuver around the spirit of the incentive and still take advantage of the bonus awarded.

Thirdly, "since the real estate industry had selected the tower-without-expanded-base typology as its preferred massing for many office and residential developments, the tower

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[10] Kayden, p.12.
[11] Kayden, p.12.
[12] Kayden, p.12.
[13] Kayden, p.12.

by zoning law could cover only 40% of the lot, and the remaining 60% of the lot was not going to be left as dirt, the setting off of buildings with plazas in front and on both sides seemed inevitable."[14]

In summary, there was in essence no special effort, or any economic sacrifice from the developers' standpoint to construct a plain and simple "as-of-right" public space in exchange for the bonus. For the developers, "there was almost nothing to lose and almost everything to gain."[15]

1.6.Legal Obligations of the Property Owner

According to Kayden, "'Privately owned' refers to the legal status of the land and/or building on or in which the public space is located. The land and building are owned by private entities commonly associated with commercial and residential real estate in New York City."[16] "Public space", on the other hand, "is not public property-- a city park, neighborhood library, street, or sidewalk-- because it is not owned by the City on behalf of the people it represents. Nor has the City exercised its power of eminent domain to take private property and convert it to public space, after paying just compensation to the private owner. ... Public space means a physical place located on private property to which the owner has granted legally binding rights of access and use to members of the public,

[14] Kayden, p.12.
[15] Kayden, p.12.
[16] Kayden, p.21.

most often in return for something of value from the City to the owner. Since ownership continues to reside with the private owner, public space may be thought of as an easement held by the public on the owner's property, whose extent is defined by the City's Zoning Resolution and by implementing legal actions."[17]

Although the space continues to be "privately owned", the owner has legally surrendered significant rights associated with its private property, including the right to exclude others, and the freedom to treat this part of its property the way it wishes. Members of the public, as beneficiaries, participate in the exchange by gaining their own rights to this private property, and as a trade off they endure the extra congestion and loss of light and air that may result from the grant of extra floor area or other regulatory concessions.[18]

The basic law governing the design and operation of privately owned public space, as well as the law enforcing their compliance with applicable standards, is codified in the City's 1961 Zoning Resolution, as originally enacted and as amended from time to time over the past 42 years. The resolution regulates the use, size, and shape of all buildings constructed in the City and lays out an administrative framework within which developers are able to seek approval for their proposed buildings. "Since 1961, the Zoning Resolution has enumerated 12 discrete legal types of privately owned public space,"[19] as well as spaces

[17] Kayden, p.21.
[18] Kayden, p.23.
[19] Kayden, p.25.

geographically tailored to specific needs in some of the City's special purpose zoning districts, and spaces customized for individual buildings.

Usually, a space will have several discrete legal actions that govern it. Thus, in order to grasp fully the "law" for a given space, it is necessary not only to scrutinize the relevant provisions of the Zoning Resolution, but also to read each of the implementing legal instruments that detailed the specific requirements governing the space.

1.7.Result of the Incentive Zoning Practice

According to Kayden's research, the City has obtained 503 privately owned public spaces at 320 commercial, residential, and community facility buildings. The total area of privately owned public spaces is 3,584,034 square feet, or slightly more than 82 acres, which cover almost 10% of Central Park's 840 acres, more than double the combined area of the four City-owned parks, or almost 30 average city blocks[20].

The 1961 Zoning Resolution's public space provisions were very effective in promoting specific street level spaces. However, measured in qualitative terms the results are uneven. At their best, the spaces have facilitated the public with very pleasant places for accidental and planned social and recreational activities. At their worst, the spaces have been hostile to public use.

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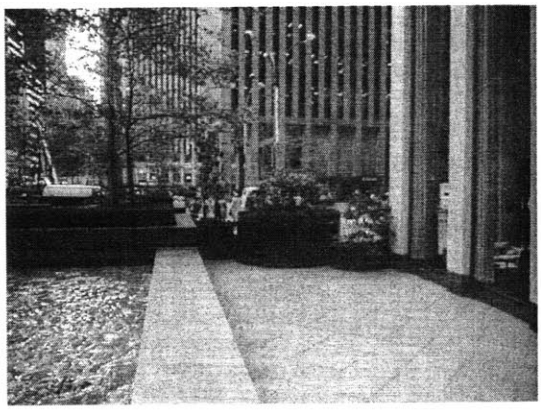
[20] Kayden, p.44.

1.8.Owner's Reluctant Attitude in Maintenance



Objects that block access to portions of public space at 1251 Sixth Avenue. Source: Kayden, p. 56.

As in any cases, whenever there is the conflict between private and public interest, the private interest is always of first priority in the owners' decision-making process. It was not difficult to understand property owners' reluctance in complying with the requirements regarding the maintenance and operation of the privately owned public space, when they deem it a pure obligation without any benefit to themselves.

Gates closed during hours they should be open at the Monarch. Source: Kayden, p. 56.

According to Kayden, in their daily practice, some owners see economic value in shifting the use of the space from public to private interests. The majority of them envisage only costs, rather than benefits, associated with the operation of the spaces. Although some owners are willing to treat outsiders without prejudice, others exercise a deliberate separation between the two. When ownership of the space changed from the initial developers to successive owners, the later

may not appreciate that the original developers received a substantial financial benefit in return for provision of the public space.

Part of the purpose and result of this research is to help identify the many advantages of the privately owned public space that have not been fully recognized by property owners.

2. Problem Statement & Methodology

2.1.Questions to Answer

Does owning and maintaining the privately owned public space merely a burden to the property owner? Are there any hidden economic benefits not fully recognized? Can privately owned public space add value to the property it is attached to?

This thesis makes a preliminary attempt to evaluate "privately owned public space" attached to the office buildings in downtown and midtown Manhattan. There has been no study in this area, which is essentially a significant parameter in the decision making process of developers, property owners, as well as policy makers.

Pursuant to Joseph B. Rose, Director of the New York City Department of City Planning, successful public spaces that contribute positively to city life incorporate values of good site planning, urban context, and public accessibility and use into their design and operation. These spaces should be operated in a way that maximizes their value to the public. As a professional with planning and urban design background, the author shares the intention of planners endorsing this comment; on the other hand, from the standpoint of a real estate practitioner, this philosophy sounds demanding to a certain extent and yet,

intrigues the author's interest from another perspective: whether, in effect, there is economic value added to these properties due to the existence of a successful privately owned public space.

After all, owners pay for the maintenance of these spaces. Whether there is value added to the properties directly determines their attitude toward the operation of these spaces. Developers might clearly acknowledge the trade off between floor area bonus and public space built in the process of permitting, while owners, after several decades and transactions, might barely have any clue about their obligations to these privately owned public spaces. If favorable statistical evidence can be presented, they might feel more inclined to appropriately maintain these spaces than just obliged to do so.

In addition, the thesis also tries to examine from the urban and economic perspective, whether incentive zoning has been a win-win solution and where the lessons and broader implications could be.

2.2.Literature Review

2.2.1. Cross-sectional Hedonic Pricing Analysis

It is quite likely that tastes for features and demand for high-quality public space are variable across demand groups. Urban context sophistication is also frequently cited as a

source for the differences in the features of public space. There are however several previous studies on factor models of office rent, to which we can refer to as a starting point. The methodology of them is the widely employed hedonic pricing method.

The hedonic pricing method, as introduced by Rosen (1974) and Griliches (1971), constitutes one of the most promising tools for cost-benefit evaluations. The foundation of the hedonic method is the hedonic hypothesis that goods are valued for their utility-bearing attributes or characteristics. Rosen defines hedonic prices as "the implicit prices of attributes ... revealed to economic agents from observed prices of differentiated product and specific amount of characteristics associated with them." The key issue in the hedonic method is to identify a function, which links characteristics with prices.

This methodology applies to an unlimited number of consumer situations. In the particular case of commercial realty like office, rents are valuated according to specific attributes, which can be used to derive implicit prices of externalities such as design quality and other various amenities.

2.2.2. Studies on Office Rent & Architectural/Urban Design

Although hedonic pricing method has been widely applied to office rents in the field of real estate economics, only few of them are related to architecture and urban features.

There does exist two studies that deals with the pricing of "good architecture' in a hedonic framework.

Hough and Kratz [12] made use of a sample of 139 office structures in Chicago to develop a rental hedonic, which included as explanatory "good architecture" variables as proxied by whether old structures were recognized as historic landmarks or whether new structures were awarded the Chicago American Institute of Architects Jury Award. They found a significant rent premium associated with good architecture for the new structures (though not for the old) approaching $1.85 per square foot on an average annual rental rate of $8.27 per square foot, a 22% premium.[21] However, the data measured gross rental premiums alone without considering any additional costs of construction or operation. A more subtle concern is that it only represents a payoff to the very few successful properties with quality architecture.

Vandell and Lane [29] conducted a study, against 102 class-A office buildings in Boston and Cambridge, on the economics of architecture and urban design, which indicated a strong influence of design on rents. According to their analysis, structures rated in top 20% for design quality were predicted to extract almost 22% higher rents than those rated in the bottom 20%. In contrast, his research showed a weak relationship between vacancy behavior and design quality. Furthermore, the magnitude of the point estimates of the rent, vacancy, and construction cost effects suggest that good design may not in fact be more

[21] Vandell and Lane, p.238.

profitable on average, but as with a lottery, may provide a small probability of a high return to the developer.

Besides the aforementioned two studies relevant to architecture and urban design, the hedonic method has never been applied to office rent to examine the impact of public space before.

2.3.Methodology & Structure

2.3.1. Methodology

There are numerous determinants contributing to the value of an office property, including location, accessibility to public transportation, building age, height, total rentable area, other subsidiary services, etc. How to isolate the effect of successful public space from other factors was the major question on the authors' mind. Data source is another major concern, without which the analysis cannot be carried out. Thanks to Kayden's book which provides detailed physical documentation on each of the privately owned space in Manhattan. Together with the office rent data set from Torto/ Wheaton Research Institute, it ultimately made this research project feasible.

Like the two examples cited in the previous section, a substantial proportion of urban economics research is related to hedonic estimation of the contributors of various amenities

to property value. The result of these studies not only contributes to the value theory but also provides insights into appropriate public policies affecting urban development.

In the process of this research, the hedonic pricing method was also employed. Previous research is introduced as a benchmark to filter out important factors, to which the dummy variable of privately owned public space is added. The purpose of the analysis is to identify whether privately owned public spaces of higher quality add more value to office rent than those of lower quality.

2.3.2. Possible Implications

The result of the factor model was unknown at the beginning of the study. Intuitively, one would expect that those office buildings with favorable privately owned public space attached to them could charge a higher rent. However, no solid evidence was shown to reflect exactly how much that premium would be.

Although policy makers regard zoning incentives as a legitimate method in urban regulation, they possess mostly qualitative explanation and lack of convincing quantitative proofs. Generally, developers' motivation in building public space only stays at the level of in exchange for more floor area bonus. Maintenance of these spaces seems an extra burden or an obligation that property owners are reluctant to comply with. If the result of the regression were positive, it could work as solid evidence in support of policy maker as well

as a great incentive for constructing and maintaining the privately owned public space. If not, it might at least act as a solicitation for further reflection on urban regulations and policies.

3. Data Processing & Regression Analysis

3.1.Data Sources

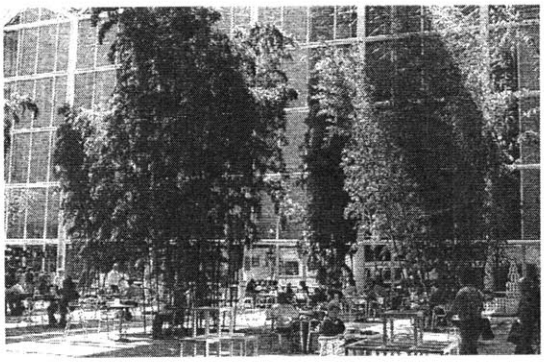
3.1.1. Kayden's Rating of Space Quality

There are many components that together determine the quality of public space, including lay out, pavement, street furniture and various facilities on the micro-level, as well as spatial orientation and response to the surrounding urban environment on the macro-level. It is relatively hard to classify them since most of the attributes are non quantifiable. Lack of consensus on the criteria could hinder the measurement. Fortunately, we have Kayden as the precedent, who, together with the New York City Department of City Planning, invested huge amounts of time and energy in the investigation and examination of these spaces.

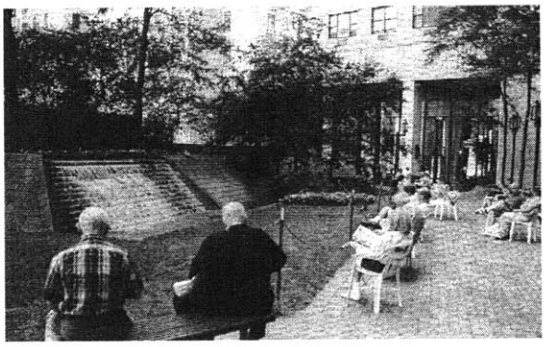
Based on long-term observation and expert judgment, their analysis of the City's 503 privately owned public spaces reveals five major public space use classifications, including Destination, Neighborhood, Hiatus, Circulation, and Marginal spaces. These classifications effectively describe the role that public spaces play in the life of the city, as well as how

they function for the wide variety of users. The following is Kayden's definition for the five categories of privately owned public spaces respectively.

(1) Destination Space—high quality public space that attracts employees, residents, and visitors from outside, as well as from the immediate neighborhood. Users socialize, eat, shop, view art, or attend a programmed event, although they may also visit the space for sedentary, individual activities of reading and relaxing. The design supports a broad audience: spaces are usually sizable, well proportioned, brightly lit if indoors, aesthetically interesting, and constructed with first-class materials. Amenities are varied and frequently include some combination of food service, artwork, programmatic activities, restrooms, retail frontage, and water features, as well as seating, tables, trees, and other plantings.



Destination space at 590 Madison Avenue, Source: Kayden, p.50.

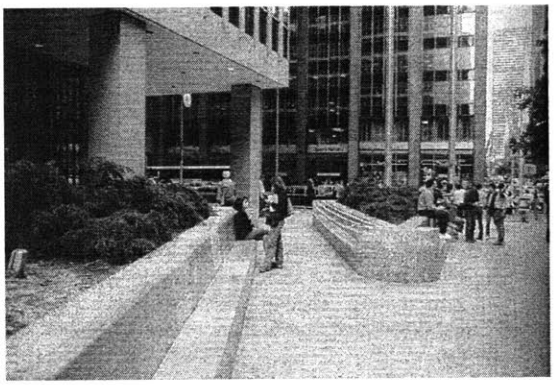


Neighborhood space at 30 Lincoln Plaza, Source: Kayden, p.50.

(2) Neighborhood Space—high quality space that draws residents and employees from the immediate neighborhood, including the host building and surrounding buildings within

a three-block radius. Users go to neighborhood space for such activities as group socializing, taking care of children, and individual reading and relaxing. Neighborhood spaces are generally smaller than destination spaces, are strongly linked with the adjacent street and host building, are oriented toward sunlight, are made with good construction materials, and are carefully maintained. Amenities typically include seating, tables, drinking fountains, water features, planting, and trees, but no food service and programmatic uses sometimes found in destination spaces.

(3) Hiatus Space—public space that accommodates the passing user for a brief stop, but never attracts neighborhood or destination use. Usually next to the public sidewalk and small in size, such spaces are characterized by design attributes geared to their modest function, and include such basic functional amenities as seating.



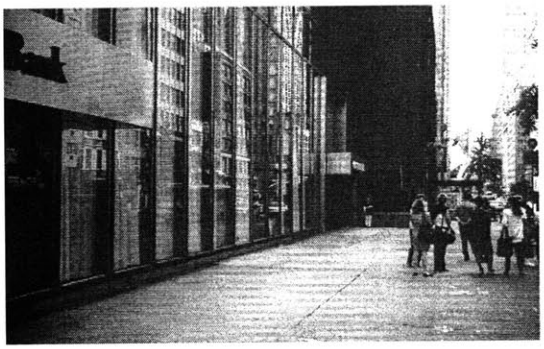
Hiatus space at PaineWebber,
Source: Kayden, p.50.

(4) Circulation Space—public space that materially improves the pedestrian's experience of moving through the city.

Circulation space at CitySpire,
Source: Kayden, p.50.

Its principal purpose is to enable pedestrians to move faster from point A to point B, and/or to make the journey more comfortable by providing weather protection for a significant stretch.

(5) Marginal Space—public space that lacking satisfactory levels of design, amenities, or aesthetic appeal, deters members of the public from using the space for any purpose. Such spaces usually have one or more of the following characteristics: barren expanses or strips of concrete or terrazzo, elevations above or below the public sidewalk, inhospitable microclimates characterized by shade or wind, no functional amenities, spiked railings on otherwise sittable surfaces, dead or dying landscaping, poor maintenance, drop-off driveways, and no measurable public use.

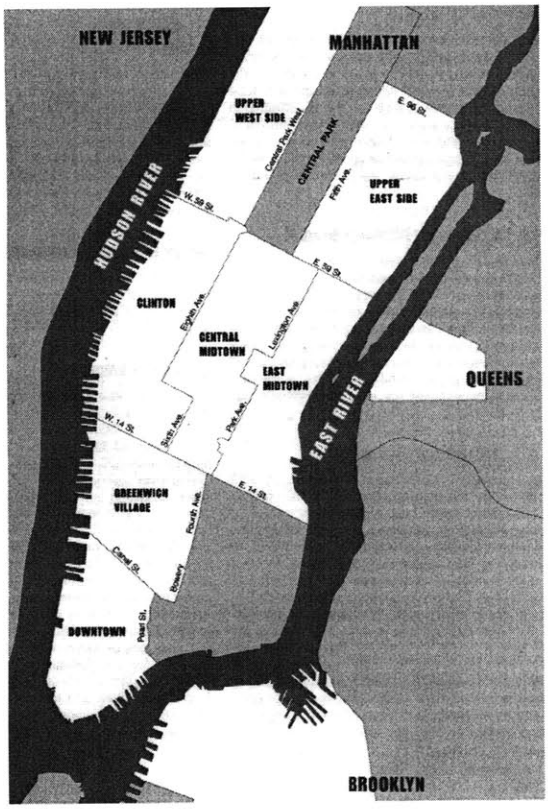


Marginal space at 950 Third Avenue,
Source: Kayden, p.50.

Kayden's space-by-space evaluation of the City's 503 privately owned public spaces reveals that there are 15 destination spaces, constituting 3% of the total, 66 neighborhood spaces (13%), 104 hiatus spaces (21%), 91 circulation spaces (18%), and 207 marginal spaces (41%). According to him, these privately owned public spaces are at 320 office, residential, and community facility buildings, principally concentrated in the downtown,

midtown, upper east side, and upper west side districts of the borough of Manhattan where the development of large office and residential towers is most likely to occur.

Kayden's research [15], however, did not provide property type information as well as detailed provisions about each property's zoning bonus, rather it examined these properties more from the urban design and judicial inspection's perspective. Among the 320 properties, three are in downtown Brooklyn and one is in Long Island City. Therefore, totally 316 properties in Kayden's book are in the borough of Manhattan.



Major Districts in Manhattan,
Source: Kayden 72.

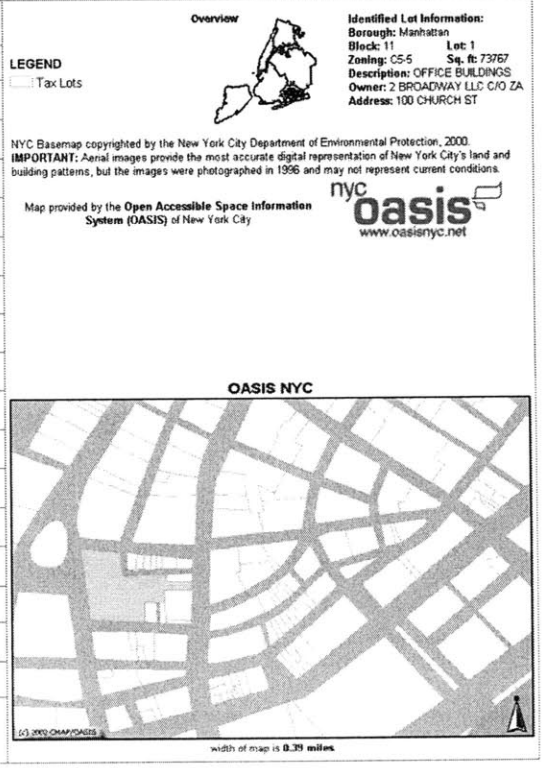
Within these 316 Manhattan buildings, there are residential, hotel, educational, religious, utility and hospital properties besides office buildings. Therefore, the first task upon obtaining Kayden's data set is to distinguish office from non-office within the recorded properties. Although the book mentioned that a database on CD including all the properties' digital information was to be published, it was not available by the time this research was conducted.

Therefore, the author was challenged to collect the property type information for each of these 316 properties.

Thanks to Kayden's referral of the Open Accessible Space Information System for New York City, (OASIS NYC, http://www.oasisnyc.org) where NYC Department of Finance's Real Property Assessment Database is linked with GIS to jointly facilitate public inquiry of real property assessment data by tax lot. Specifically, as shown from an example in Exhibit 1, it includes block ID, lot ID, lot dimension, lot area, property address, zip code, zoning code, land-use, detailed description, year built, building stories, number of residential units, assessed value of the property, market value of the property, and owner information, etc.

Exhibit 1: OASIS NYC Real Property Assessment Data by Tax Lot

Block	11
Lot	1
Lot Frontage (ft)	307
Lot Depth (ft)	382
Assessor Area est. (sq. ft)	72130
Address	2-8 BROADWAY
ZIP	10004
Number of Buildings	1
Zoning Code	C5-5
Land-use Description	OFFICE BUILDINGS
Detailed Description	Tower Types
Year Bldg Built	1958
No. of Building Stories	32
No. of Residential Units	0
Assessed Value	59400000
Market Value	140000000
Owner	2 BROADWAY LLC C/O ZA
Owner Address	100 CHURCH ST
Owner Zip	NY 10007



Although it was a puzzle when one building used two addresses respectively referring to the two streets fronting on different sides, the author managed to identify each building in Kayden's book by matching their property footprint with maps generated out of the search on OASIS NYC. A substantial amount of time was committed on this tedious manual identification process. In the end, the author eventually found the accurate property type information for each of the Kayden buildings. Please refer to Appendix 1 for details.

As a result, there are totally 132 Kayden properties that can be attributed to office buildings. The remaining property type allocations are listed in Exhibit 2.

Exhibit 2: Property Type of Kayden's Building			
Office	132	Utility	2
Residential	164	Education	3
Hotel	12	Religious	1
Hospital	2	Total	316

3.1.2. Wheaton's Contribution of Office Data Set

The next step is to get sufficient information related to these 132 office buildings' rent and other attributes. Thanks to Professor William Wheaton, who provided the author a data set, with information on about 1000 New York office buildings' rent and property attributes, from the CB Commercial/Torto Wheaton Research (CBC/TWR) Database[22]. All the office buildings in this data set are either in downtown or midtown Manhattan.

[22] Wheaton [32].

The CBC/TWR office and industrial database contains two main data files—the master building file and the building history file. The master building file contains one entry for every building that has ever been included in the system and contains "static" information about the building, such as address, longitude and latitude, year built, and over forty other pieces of information. "Static" information may change since processes, such as renovation, may alter these variables. The building history file has one entry per building per quarter. In total, this file contains over 5 million entries. Each entry contains non-static variables, such as vacant square feet, asking lease rate, sublease space available, plus additional information on leases and asking rents. The data comes as a quarterly "snapshot". Such kind of building-by-building data have been gathered quarterly since 1987.

Exhibit 3: Variables in CBC/TWR Data Set

Abbreviation	Definition	Abbreviation	Definition
ID	ID of the building	Lslow	Low Asking Rent for Vacant Space
Major_mkt	Downtown or Midtown	Lshigh	High Asking Rent for Vacant Space
Submktname	Name of the sub-markets	Lstype	G: gross lease; NA: not available
Status	E: existing; P: planned;	Status	U: under construction; ?: un-researched or demolished
Stname	Street Name	Vac	Area of Vacant Space
Stnum	Street Number	Tot	Area of Total Space Available for Lease
Stdir	Street Direction	Sublet	Area of Space for Sublease
Tenant	MT: multi-tenant ST: single tenant	Nearstop	Linear Distance to the Nearest Subway Stop (in 0.01 miles)
County	Manhattan	Sfmin	Minimum Contiguous Vacant Space
Zip	Zip Code	Sfmax	Maximum Contiguous Vacant Space
Bname	Building Name	Contig	Area of Contiguous Space to Rent
Latt	Latitude	Class	Class A, B or C
Long	Longitude	Submkt_ndx	ID Number of the Sub-markets
Cmplx_id	Building Complex ID	Nra	Net Rentable Area
Addr	Address	Floors	Total Floors of the Building
Ycoord	Y coordinate	Built	Year Building Built
Xcoord	X coordinate	Renov	Year Building Renovated
Ownuse	Owner use: Y: yes; N: no	Sub_d_2_gc	Linear Distance from the Nearest Subway Stop to Grand Central (in 0.01 miles)

According to James Costello, a research scholar at Torto Wheaton Research Insitute, the data set used for this thesis was from the first quarter of 2002. Please refer to Exhibit 3 for a list of variables in this data set.

All the office buildings in Wheaton's data set belong to two major markets, midtown Manhattan, and downtown Manhattan. The CBC/TWR data set also defined 18 sub-markets within these two major markets. For the purpose of further analysis, the author assigned dummy variables to represent each of these sub-markets. Please refer to Exhibit 4 for detail.

Exhibit 4: Sub-Market Name and ID

Sub-market ID	Dummy #	Sub-Market Name	Major Market
NYO0423	D_23	Battery Park	Downtown
NYO0424	D_24	City Hall District	Downtown
NYO0425	D_25	Greenwich Village	Downtown
NYO0426	D_26	Insurance District	Downtown
NYO0427	D_27	So. Ferry Financial District	Downtown
NYO0428	D_28	World Trade Center	Downtown
NYO0429	D_29	Columbus Circle	Midtown
NYO0430	D_30	East Midtown South	Midtown
NYO0431	D_31	Garment District	Midtown
NYO0432	D_32	Grand Central/UN	Midtown
NYO0433	D_33	Madison Ave	Midtown
NYO0434	D_34	Park/Lexington	Midtown
NYO0435	D_35	Penn Station	Midtown
NYO0436	D_36	Plaza District	Midtown
NYO0437	D_37	Rockefeller Center	Midtown
NYO0438	D_38	Third Avenue	Midtown
NYO0439	D_39	Time Square/Theatre District	Midtown
NYO0440	D_40	West midtown south	Midtown

Within one particular data set, some properties may have no rent data as the data set only looks at buildings during that period of time that are actively marketing space. If a building has no vacant space on the market, it will not report a rent. After excluding those none-active buildings in Wheaton's data set, only 585 properties that provide rent information remain useful for the research purpose of this thesis.

3.1.3. Merger of the Two Data Sets

Not all the 132 office buildings in Kayden's book are lucky enough to find corresponding information in Wheaton's data set. The common office buildings that fall both in Kayden's book and Wheaton's data set are 74. Appendix 1 shows these 74 properties. Among them, 3 properties [23] are Class B office buildings, while the rest are all Class A office properties. There are also 2 properties whose public spaces are under construction or alternation. The allocation of these public spaces is listed in Exhibit 5.

Exhibit 5: Distribution of Public Spaces Attached to the 74 Kayden's Office Properties

Destination	Neighborhood	Hiatus	Circulation	Marginal	Construction (U)
3	10	27	15	17	2

In other words, within the 585 office buildings in Wheaton's data set from midtown and downtown Manhattan, 74 buildings have privately owned public space attached to them, and the remaining 511 properties do not. Thus, the research object could be narrowed down to these two groups of data sets.

[23] These 3 properties are with: Kayden ID 54-Wheaton ID 242142, Kayden ID 35-Wheaton ID 256123, and Kayden ID 36-Wheaton ID 256128.

3.1.4. Data Cleansing of the Merged Data Set

Data cleansing within the merged data set is necessary before setting out the analysis.

First of all, in the "status" column, there are 2 entries of "?", 1 entry of "U", and the rest are all entries of "E"(existing building). Therefore, after these 3 special properties are excluded, the column of "status" could be discarded. Secondly, there are two properties whose public spaces are under construction or alternation[24]. These 2 properties were excluded. Thirdly, there are 63 Wheaton observations[25] that do not have "Sfmin" value. Besides, there are 37 more observations[26] that only have entries of "Sfmin" without entries of "Sfmax". Therefore, these 100 observations were excluded, including 3 Kayden properties. After these three steps, 105 observations are discarded, including 5 Kayden properties.

The column of "Lstype" (lease type) provides no meaningful information for the research, and thus is discarded. Many of the properties do not have "Lshigh" (high asking rent) information, so the column of "Lshigh" was also discarded.

[24] These 2 properties are with: Kayden 176- Wheaton ID 275065, and Kayden ID 143- Wheaton ID 291086.
[25] Including one Kayden property: Kayden ID 45- Wheaton ID 252106.
[26] Including two Kayden properties: Kayden ID 125- Wheaton ID 242157, Kayden ID 133- Wheaton ID 242158.

Till this step, 480 observations (including 69 Kayden Properties) remain. Further cleansing work is needed regarding certain variables. New variables, shown in Exhibit 6, are also defined as gauges to measure the quality of the data (recall Exhibit 3 for the definition of variables).

Up to this point, there remain 475 Wheaton properties, including 68 Kayden properties. These 475 Wheaton properties (with the 68 Kayden properties) are the final target of the regression analysis.

Exhibit 6: Supplemental Variables

Variables	Formula	Meaning	Range and Measurement
Vac_Nra	Vac/Nra	Vacancy rate	0%-62%. Only one[27] with 95% vacancy rate, and thus discarded.
Vac_Tot	Vac/Tot	Percentage of available space that are vacant	0-100%.
Sub_Tot	Sublet/Tot	Percentage of available space that are for sublet	0-100%
Tot_Nra	Tot/Nra	Percentage of net rentable area that are available to lease	0-86%
Sub_Nra	Sub/Nra	Percentage of net rentable area that are available to sublease	0-44%
Note: Tot includes Vac and Sublet. The sum of Vac and Sublet is less or equal to two times of Tot. From the data set, one can figure out that some space is counted both as Vac and Sublet.			
Sfmin_Tot	Sfmin/Tot	Minimum contiguous vacant space / total space available for lease	0-65%. There is one observation[28] that has a value lager than 1, and thus should be discarded.
Sfmax_Tot	Sfmax/ Tot	Maximum contiguous vacant space / total space available for lease	0-80%. There is one extra observation[29] besides the one mentioned in the above cell that has a value lager than 1, and thus should be discarded.
Con_Tot	Contig/Tot	Total contiguous vacant space / total space available for lease	0-100%. There are two more observations[30] that have value larger than 1, and thus should be discarded.

[27] Kayden ID 35-Wheaton ID 256123, a class B office property.
[28] A none Kayden property: Wheaton ID-281661.
[29] A none Kayden property: Wheaton ID-296310.
[30] Two none Kayden properties: Wheaton ID-279057 and 281672.

3.2.Data Processing

3.2.1. Additional Variables for Further Analysis

For the purpose of further analysis, some additional variables, as shown in Exhibit 7, were created, including:

Exhibit 7: Additional Newly Created Variables

Variables	Formula	Meaning
Age	= 2002-Built	Age of the building
D_ren	= 1 if renovated, otherwise = 0	Dummy variable of renovation
PS_G	= 1 for "Destination Space" = 2 for "Neighborhood Space" = 3 for "Hiatus Space" = 4 for "Circulation Space" = 5 for "Marginal Space" = 6 for none-Kayden property	Dummy variable as an indicator for Kayden's rating of the quality of public space
PS_1	= 1 if "PS_G" < 2, otherwise = 0	Grade 1 properties
PS_2	= 1 if "PS_G" < 3, otherwise = 0	Grade 1 - 2 properties
PS_3	= 1 if "PS_G" < 4, otherwise = 0	Grade 1 - 3 properties
PS_4	= 1 if "PS_G" < 5, otherwise = 0	Grade 1 - 4 properties
PS_5	= 1 if "PS_G" < 6, otherwise = 0	Grade 1 - 5 properties
D_cls	= 1 if "Class" = A = 2 if "Class" = B = 3 if "Class" = C	Dummy variable as an indicator for the class of the office building
D_dtown	= 1 if Major_mkt = Downtown, otherwise = 0 (Mid-town)	Dummy variable as an indicator for downtown major market

PS_G is the rating of the public space, while PS_1 through PS_5 are different ways of grouping these properties according to the Kayden ratings. Please also refer to the next section for detail.

3.2.2. Mean Rent of Kayden Properties

Exhibit 8 shows the distribution of the 68 Kayden properties across the five Kayden rated categories and their corresponding mean rents.

According to Kayden's rating, the 68 properties can be divided into two opposite groups, using 5 different criteria. Exhibit 9 elaborates the 5 dummy variables generated out of these criteria. Please also refer to Exhibit 7 in the previous section.

Exhibit 8: Distribution of the 68 Kayden Properties

Category	Destination	Neighborhood	Hiatus	Circulation	Marginal	Overall_PS
# Properties	3	10	26	14	15	68
Mean Rent	$68.33	$50.50	$57.21	$46.89	$47.97	$52.55

Exhibit 9: Grouping of the Public Space in the 475 Properties

Category	PS_1	PS_2	PS_3	PS_4	PS_5	No_PS	Overall
Criteria	PS_G<2	PS_G<3	PS_G<4	PS_G<5	PS_G<6	PS_G=6	Total
Properties	3	13	39	53	68	407	475
Mean rent	$68.33	$54.62	$56.35	$53.85	$52.55	$39.10	$41.03

For instance, PS_3 is defined as the group of properties with Kayden ratings less than 4, including properties with Kayden rating of 1 (destination space), 2 (neighborhood space), and 3 (hiatus space). According to this criterion, two groups are formed. Properties in Group One have 1^{st} –3^{rd} Kayden rated public space, while properties in group two have 4^{th} –5^{th} Kayden rated public space or have no public space at all. There are totally 39 properties in Group One with a mean rent of $56.35/sqft, and 436 properties in Group Two. Using this criterion (PS_3=1), further examination can tell whether there is a

statistically significant difference regarding their impact on office rent, between these two groups of properties.

It is of note that Kayden properties' mean rent ($52.55/sqft) is much higher than non-Kayden properties ($39.10/sqft).

3.2.3. Descriptive Statistics

In order to have a general picture about the traits of each of the variables, descriptive statistics are listed below, in Exhibit 10-12.

Exhibit 10: Descriptive Statistics (1)

	AGE	FLOORS	NST	D_GC	LSLOW	NRA
Definition	Age	Floors	Distance to nearest bus stop	Distance to grand central	Low asking rent	Net rentable area
Mean	66	25	12	120	4103	402288
Median	74	21	11	68	3850	274235
Standard Deviation	25	13	7	123	1409	421601
Minimum	12	7	1	13	1400	30000
Maximum	125	102	58	398	9500	2893580

The average age of these 485 properties is 66 years old, with an average building height of 25 stories. The average distance of these office properties to the subway transportation is 0.12 mile. The average linear distance from each of the properties to Grand Central Terminal is 1.20 mile. The average annual rent of these office buildings is $41.03/sqft,

with the highest rent of $95/sqft and the lowest of $14/sqft. The average net rentable area of these buildings is about 0.4 million sqft.

Exhibit 11: Descriptive Statistics (2)

	VAC	VAC_NRA	TOT	TOT_NRA	SUBLET	SUB_NRA
Definition	Vacant area	Vancancy Rate	Tot area for lease	Tot area/ net rentable area	Area for sublet	Area for sublet/net rentable area
Mean	37675	11%	54924	15%	22270	5%
Median	20000	9%	31670	12%	7741	3%
Standard Deviation	53920	11%	71324	13%	37514	7%
Minimum	0	0%	1250	1%	0	0%
Maximum	531525	62%	680211	86%	285581	44%

The average vacant space is 37.7 thousand sqft, about 11% of the total net rentable area, with the highest vacancy rate of 62% and the lowest 0%. The average total space available to lease is 54.9 thousand sqft, about 15% of the total net rentable area, with the highest rate of 86% and the lowest 1%. The average space for sublease is 22.2 thousand sqft, about 5% of the total net rentable area, with the highest rate of 44% and the lowest 0%.

Exhibit 12: Descriptive Statistics (3)

	SFMIN	SFMIN_TOT	SFMAX	SFMAX_TOT	CONTIG	CON_TOT
Definition	Minimum area for lease	SFMIN/ tot area for lease	Maximum area for lease	SFMAX/ tot area for lease	Contiguous area to lease	Contig/tot area to lease
Mean	928	4%	1960	8%	17696	42%
Median	731	2%	1438	5%	8825	35%
Standard Deviation	861	6%	1862	11%	29052	29%
Minimum	100	0%	261	0%	156	1%
Maximum	9191	65%	23500	80%	235384	100%

The average minimum contiguous vacant space to lease is 928 sqft, with the highest of 9091 sqft, and the lowest 100 sqft. The average percentage of minimum contiguous space to lease is about 4% of the total space available for lease, with the highest rate of 65% and

the lowest 0%. The average maximum contiguous space to lease is about 1960 sqft, with the highest of 23500 sqft, and the lowest of 261 sqft. The average percentage of maximum contiguous space to lease is about 8% of the total space available for lease, with the highest rate of 80% and the lowest 0%. The average contiguous vacant space is 17696 sqft, with the highest of 235384 sqft, and the lowest 156 sqft. The average percentage of contiguous space to lease is about 42% of the total space available for lease, with the highest rate of 100% and the lowest 1%.

As shown in Exhibit 13, the properties in the 475 target observations belong to two major markets, among which 102 properties are in downtown Manhattan and 373 in midtown Manhattan. The mean rent of downtown market ($32.81/sqft) is $10.46/sqft lower than the mean rent of midtown market ($43.27/sqft).

Exhibit 13: Mean Rent Summary

Category	Definition	Properties	Mean rent
D_REN	Renovated	36	$42.63
No_REN	Not renovated	439	$40.90
D_dtown	Downtown	102	$32.81
D_mtown	Midtown	373	$43.27
CLS_A	Class A office	213	$49.79
CLS_B	Class B office	229	$34.95
CLS_C	Class C office	33	$26.64
Overall	Overall	475	$41.03

There are totally three classes of office building. Among the 475 targeted observations, 213 properties belong to class A office with a mean rent of $49.79/sqft, 229 belong to class

B office with a mean rent $34.95/sqft, and 33 belong to class C office with mean rent $26.64/sqft.

Among the 475 properties, there are 36 properties that have been renovated, with a mean rent of $42.63/sqft, higher than the overall mean rent of these 475 properties ($41.03/sqft). The remaining 439 properties that have not been renovated have a mean rent of $40.90/sqft.

3.2.4. Mean Rent of the 18 Sub-markets

Exhibit 14: Mean Rent (cents) of the 18 Sub-Markets

Sub-market ID	Sub #	Sub-Market Name	Major Market	Properties	Mean Rent
NYO0436	D_36	Plaza District	Midtown	20	60.37
NYO0434	D_34	Park/Lexington	Midtown	22	58.86
NYO0428	D_28	World Trade Center	Downtown	1	55.00
NYO0433	D_33	Madison Ave	Midtown	27	54.24
NYO0437	D_37	Rockefeller Center	Midtown	17	54.18
NYO0438	D_38	Third Avenue	Midtown	12	52.75
NYO0439	D_39	Time Square/Theatre District	Midtown	24	47.23
NYO0432	D_32	Grand Central/UN	Midtown	70	45.76
NYO0429	D_29	Columbus Circle	Midtown	19	44.11
NYO0435	D_35	Penn Station	Midtown	12	34.71
NYO0427	D_27	So. Ferry Financial District	Downtown	38	34.34
NYO0430	D_30	East Midtown South	Midtown	97	34.18
NYO0425	D_25	Greenwich Village	Downtown	10	33.25
NYO0431	D_31	Garment District	Midtown	48	32.76
NYO0423	D_23	Battery Park	Downtown	10	32.00
NYO0426	D_26	Insurance District	Downtown	27	31.20
NYO0424	D_24	City Hall District	Downtown	16	30.75
NYO0440	D_40	West Midtown South	Midtown	5	28.20

There are totally 18 sub-markets in the Wheaton data set. Among them, 6 are downtown sub-markets, and 12 are midtown sub-market. Exhibit 14 lists the distribution of the 475

properties among the 18 sub-markets, in a descending sequence according to the mean rent for each sub-market.

D_29 (Columbus Circle) reflects the approximate average observations among these 18 sub-markets, and also has a mean rent around the middle level of the mean rent of these 18 sub-markets. Therefore, D_29 is chosen as the base for other sub-markets in the regression.

The observations in D_28 (World Trade Center) and D_40 (West Midtown South) are 1 and 5 respectively. For the purpose of regression analysis, the number of observations in these two sub-markets is too small relative to the sample size. Therefore, according to geographical adjacency, D_28 is merged with D_23 (Battery Park), and D_40 is merged with D_39 (Time square/ Theatre District) in the regressions of later sections.

3.3.Regression Analysis

3.3.1. Proposed Hypothetical Tests

The purpose of the first hypothesis test is to run regressions among the 475 observations and to see if the attribute of having a good quality privately owned public space can add value to the office rent. As confirmed by Professor Kayden, his book has included all the privately owned public space in New York City since the origination of the zoning

incentives. Therefore, the 68 Kayden properties are the only office buildings among the 475 Wheaton properties that possess privately owned public space attached to them.

Within the 475 observations, it is certain that there are 68 buildings that possess privately owned public space attached to them. However, for the remaining 407 properties, although it is sure that they are without privately owned public space, it is not sure though of the existence of publicly owned public space. To check the status of these buildings, the New York City's planning bureau have to be contacted to see if there is such documentation. However, one must realize that even if such a record exists, the definition can be ambiguous. Some public space might be large and surrounded by many properties, in which case it would be difficult to identify which particular property benefits from that public space. Professor Kayden suggested the author to stick to the record of his book, given the infeasibility of figuring out whether the 407 properties have publicly owned public spaces attached to them.

As described in section 2.2.1, dummy variables are introduced according to Kayden's quality rating of these privately owned public spaces. Regressions can be run among the 475 as well as the 68 office data sets, to see if higher quality public spaces add more value to office rent than lower quality ones, or ones that have no public space attached to them at all.

3.3.2. Hedonic Pricing Model of the 475 Observations

"Market" rent is determined by a number of demand and supply variables, such as building age, accessibility to public transportation, renovation, building height, footprint, vacancy rate etc., including such urban amenities as the existence of privately owned public space.

Vacancy rate (denoted as "vac_nra") in the real estate market can be attributed to a number of factors (see Vandell and Lane [32]), including the cost of holding inventory, searching cost, information cost, tenant heterogeneity, rigidity in lease structure, lease timing, and "building ahead" under conditions of lumpy supply and variable demand. The vacancy rate individual landlord experiences is dependent on his rent level relative to that of the "market" rent.

In the following, rental hedonic will be examined, including various amenities and attributes that jointly reflect the rental behavior in the office market. Among these factors, PS_1, PS_2, PS_3, PS_4, PS_5 and PS_G are dummy variables defined in the former sections (2.2.1 and 2.2.2), as indicators of owning privately owned public spaces and the quality rating of these spaces. For the purpose of convenience, "NST" is used to denote "Nearstop" and "D_GC" to denote "Sub_d_2_gc".

The null hypothesis is that the coefficient of the public space vector equals zero, and the intention is to reject this null hypothesis. Recall from section 2.2.4 that sub-market 29, the

Columbus Circle, is chosen as the base of regression for other sub-markets. Also, D_28 is merged with D_23, and D_40 is merged with D_39. The rental regression model is thus shown below:

$$LSLOW = \alpha_1*AGE + \alpha_2*CONTIG + \alpha_3*D\_CLS + \alpha_4*D\_GC + \alpha_5*D\_REN + \alpha_6*FLOORS + \alpha_7*NRA + \alpha_8*NST + \alpha_9*PS\_1 + \alpha_{10}*SFMAX + \alpha_{11}*SFMIN + \alpha_{12}*SUBLET + \alpha_{13}*TOT + \alpha_{14}*VAC\_NRA + \alpha_{15}*D\_23\_28 + \alpha_{16}*D\_24 + \alpha_{17}*D\_25 + \alpha_{18}*D\_26 + \alpha_{19}*D\_27 + \alpha_{20}*D\_30 + \alpha_{21}*D\_31 + \alpha_{22}*D\_32 + \alpha_{23}*D\_33 + \alpha_{24}*D\_34 + \alpha_{25}*D\_35 + \alpha_{26}*D\_36 + \alpha_{27}*D\_37 + \alpha_{28}*D\_38 + \alpha_{29}*D\_39\_40 + \varepsilon$$

As described in section 2.2.2, the 5 criteria of grouping the 475 properties according to their Kayden ratings will be used in a series of regressions respectively, simply by replacing the variable "PS_1" with "PS_2" through "PS_5". The variable "PS_G" will also be examined to see whether there is a general trend across the 6 rating levels.

Exhibit 15: Definition of the Variables in the Hedonic Pricing Equation

Abbreviation	Definition
LSLOW	Low asking rent
AGE	Building age
CONTIG	The area of contiguous space for lease
D_CLS	Dummy variable of building class (A=1, B=2, C=3)
D_GC	Distance to grand central
D_REN	Dummy variable of renovation, renovated=1, non-renovated=0
FLOORS	Total floors
NRA	Net rentable area
NST	Distance to nearest stop
PS_1	Dummy variable of privately owned public space PS_1=1 if rated "destination" by Kayden, otherwise PS_1=0
SFMAX	Maximum space to lease
SFMIN	Minimum space to lease

SUBLET	Area available for sublet
TOT	Tot area of space for lease
VAC_NRA	Vacancy rate
D_23_28	Battery Park or World Trade Center
D_24	City Hall District
D_25	Greenwich Village
D_26	Insurance District
D_27	So. Ferry Financial District
D_30	East Midtown South
D_31	Garment District
D_32	Grand Central/UN
D_33	Madison Ave
D_34	Park/Lexington
D_35	Penn Station
D_36	Plaza District
D_37	Rockefeller Center
D_38	Third Avenue
D_39_40	Square/Theatre District or West Midtown South

Relative to the sample size of 475, observations of PS_1 (only 3) and PS_2 (only 16) seem too limited, and running regression on these two variables makes no sense. Therefore, only regressions with PS_3, PS_4, PS_5 and PS_G were carried out.

In total, two rounds of regressions were conducted. The first round, as shown in Appendix 2, included all the variables, encompassing "SFMAX", "SFMIN", and "TOT". However, the definitions of SFMAX and SFMIN are not very clear and the data quality of these two variables is also doubtful. The variable TOT possesses certain overlap with the other two variables SUBLET and VAC_NRA. Therefore, to eliminate the noise from SFMAX, SFMIN and TOT, a second round of regressions was carried out without these three variables, and the results were more explanatory. Please refer to Exhibit 16-19 for details.

3.3.3. Four Cases of the Hedonic Pricing Model

As the major question of this research is whether higher quality privately owned public spaces add more to office rent than lower quality ones, the problem is transferred into how higher quality is defined relative to lower quality.

The author set up a primary case in which the line of demarcation is drawn between the 3rd and 4th Kayden ratings. In other word, spaces fall into the first three categories of Kayden ratings, including Destination, Neighborhood, and Hiatus spaces are classified as Group One of higher quality, while those fall into the rest two categories of Kayden ratings, including Circulation and Marginal Spaces, or without privately owned public space at all are classified as Group Two of lower quality. As mentioned previously, dummy variable PS_3 is defined as the indicator of this attribute, with spaces in Group One has a PS_3 value of 1, and spaces in Group Two has a PS_3 value of 0. The regression result of this primary case is listed in Exhibit 16.

Exhibit 16: Regression with PS_3 (the Primary Case)
Dependent Variable: LSLOW (low asking rent)
Method: Least Squares
Sample: 1 475
Included observations: 475

Variable	Coefficient	Std. Error	t-Statistic	Prob.	Definition of Variable
C	5217.75	394.15	13.24	0.000	Constant
AGE	-3.19	2.64	-1.21	0.228	Building age
CONTIG	0.00483	0.00178	2.72	0.007	Contiguous space for lease
D_CLS	-519.83	106.35	-4.89	0.000	Dummy variable of building class
D_GC	-2.27	2.14	-1.06	0.290	Distance to grand central
D_REN	231.06	173.49	1.33	0.184	Dummy variable of renovation
FLOORS	5.67	5.30	1.07	0.285	Total floors
NRA	0.00034	0.00017	1.93	0.054	Net rentable area
NST	-2.43	6.94	-0.35	0.727	Distance to nearest stop
PS_3	504.97	188.74	2.68	0.008	Dummy variable of privately owned public space
SUBLET	-0.00479	0.00160	-3.00	0.003	Area available for sublet
VAC_NRA	-1517.48	500.20	-3.03	0.003	Vacancy rate
D_23_28	126.53	714.93	0.18	0.860	Battery Park or World Trade Center
D_24	-217.17	576.80	-0.38	0.707	City Hall District
D_25	28.40	490.38	0.06	0.954	Greenwich Village
D_26	-191.51	630.18	-0.30	0.761	Insurance District
D_27	-94.41	680.93	-0.14	0.890	So. Ferry Financial District
D_30	-296.06	247.18	-1.20	0.232	East Midtown South
D_31	-461.36	269.28	-1.71	0.087	Garment District
D_32	185.22	285.07	0.65	0.516	Grand Central/UN
D_33	912.67	292.56	3.12	0.002	Madison Ave
D_34	1178.68	305.09	3.86	0.000	Park/Lexington
D_35	-522.43	357.14	-1.46	0.144	Penn Station
D_36	1412.03	306.42	4.61	0.000	Plaza District
D_37	509.97	334.62	1.52	0.128	Rockefeller Center
D_38	427.63	361.79	1.18	0.238	Third Avenue
D_39_40	240.82	290.02	0.83	0.407	Square/Theatre District or West Midtown South

R-squared	0.5792	Mean dependent var	4102.7
Adjusted R-squared	0.5547	S.D. dependent var	1409

In the 475 observations, there are a total of 39 properties (8.2%) with PS_3=1.

The result is relatively strong and provides the basis for further explanation. The t-stat for PS_3 is 2.68 (larger than 1.96), with a coefficient of 505 and a standard error of 189. It is statistically significant at the 0.8% level that having a 1^{st} –3^{rd} Kayden rated privately owned public space can add approximately $5.05/sqft rent to the office annually, compared to properties with 4^{th} – 5^{th} Kayden rated public space or with no public space at all. The regression equation can explain the attributes of rent to an extent of 57.9%.

The mean rent of the 475 properties is $41.03/sqft; the mean rent of the 39 1^{st} - 3^{rd} Kayden rated properties is $56.35/sqft; the mean rent of the rest 436 none 1^{st} - 3^{rd} rated properties is $39.66/sqft. If taking $41.03 as the basis, having a 1^{st} to 3^{rd} Kayden rated privately owned public space appears to add a 12.3% ($5.05/$41.03) premium annually to office rent. The regression also sorted out a set of variables that are statistically significantly correlated with rent, including CONTIG (contiguous space to lease), D_CLS (office class), SUBLET (space available for sublet), VAC_NRA (vacancy rate), D_33 (Madison Ave), D_34 (Park/Lexington), and D_36 (Plaza District).

Three more tests based on the primary case are also conducted, by shifting the demarcation line towards a lower level of Kayden rating. For instance, the second test defines PS_4 by switching the 4^{th} rated Kayden space, the Circulation space from Group Two of lower quality to Group One of higher quality. In other words, it loosens the definition of higher quality spaces. The regression result with PS_4 is listed in Exhibit 17.

Exhibit 17: Regression with PS_4 (the 2nd Case)
Dependent Variable: LSLOW (low asking rent)
Method: Least Squares
Sample: 1 475
Included observations: 475

Variable	Coefficient	Std. Error	t-Statistic	Prob.	Definition of Variable
C	5148.54	400.08	12.87	0.000	Constant
AGE	-3.12	2.72	-1.15	0.252	Building age
CONTIG	0.00462	0.00178	2.60	0.010	Contiguous space for lease
D_CLS	-508.63	106.45	-4.78	0.000	Dummy variable of building class
D_GC	-2.22	2.15	-1.03	0.302	Distance to grand central
D_REN	200.16	174.09	1.15	0.251	Dummy variable of renovation
FLOORS	5.10	5.34	0.96	0.340	Total floors
NRA	0.00038	0.00017	2.20	0.029	Net rentable area
NST	-2.23	6.97	-0.32	0.749	Distance to nearest stop
PS_4	386.27	176.34	2.19	0.029	Dummy variable of privately owned public space
SUBLET	-0.00481	0.00160	-3.01	0.003	Area available for sublet
VAC_NRA	-1476.24	501.95	-2.94	0.003	Vacancy rate
D_23_28	165.75	717.12	0.23	0.817	Battery Park or World Trade Center
D_24	-193.71	578.69	-0.33	0.738	City Hall District
D_25	48.45	492.14	0.10	0.922	Greenwich Village
D_26	-175.82	632.13	-0.28	0.781	Insurance District
D_27	-98.99	682.70	-0.14	0.885	So. Ferry Financial District
D_30	-265.92	248.18	-1.07	0.285	East Midtown South
D_31	-427.11	270.97	-1.58	0.116	Garment District
D_32	239.16	287.47	0.83	0.406	Grand Central/UN
D_33	980.66	295.34	3.32	0.001	Madison Ave
D_34	1249.39	308.12	4.05	0.000	Park/Lexington
D_35	-485.23	359.00	-1.35	0.177	Penn Station
D_36	1443.82	307.24	4.70	0.000	Plaza District
D_37	565.17	336.72	1.68	0.094	Rockefeller Center
D_38	481.89	362.69	1.33	0.185	Third Avenue
D_39_40	279.48	291.13	0.96	0.338	Square/Theatre District or West Midtown South

R-squared	0.577	Mean dependent var	4102.7
Adjusted R-squared	0.5525	S.D. dependent var	1409

In the 475 observations, there are totally 53 properties (11.2%) with PS_4=1.

The t-stat for PS_4 is 2.19, with a coefficient of 386 and a standard error of 176. It is statistically significant at the 2.9% level that having a 1st –4th Kayden rated privately owned public space appears to add about $3.86/sqft (a premium of 9.4%=$3.86/$41.03) to the office rent annually, compared to properties with 5th Kayden rated public space or with no public space at all. The regression equation can explain the attributes of rent to an extent of 57.7%. Besides the same set of statistically significant variables, NRA also appeared statistically significant in this regression.

The third test defines PS_5 by switching the 5th rated Kayden space, the Marginal space from Group Two of lower quality to Group One of higher quality. In other words, it loosens the definition of higher quality spaces further. The regression result with PS_5 is listed in Exhibit 18. The t-stat for PS_5 is 1.23, with a coefficient of 211 and a standard error of 172. It is statistically significant at the 22.0% level that having a 1st –5th Kayden rated privately owned public space appears to add about $2.11/sqft (a premium of 5.1%=$2.11/$41.03) to the office rent annually, compared to properties with no public space at all. The regression equation can explain the attributes of rent to an extent of 57.4%. Besides the same set of statistically significant variables, NRA also appeared statistically significant in this regression. The coefficient of the privately owned public space in the 3rd case is not as statistically significant as the previous cases, which makes sense. Since the 5th rated Kayden spaces are Marginal spaces that lack of amenity and not usable, it is more appropriate to categorize the into the lower quality group than into the higher quality group.

Exhibit 18: Regression with PS_5 (the 3rd Case)
Dependent Variable: LSLOW (low asking rent)
Method: Least Squares
Sample: 1 475
Included observations: 475

Variable	Coefficient	Std. Error	t-Statistic	Prob.	Definition of Variable
C	5212.35	401.99	12.97	0.000	Constant
AGE	-3.80	2.82	-1.35	0.178	Building age
CONTIG	0.00455	0.00179	2.55	0.011	Contiguous space for lease
D_CLS	-503.20	106.79	-4.71	0.000	Dummy variable of building class
D_GC	-2.33	2.16	-1.08	0.281	Distance to grand central
D_REN	200.68	175.15	1.15	0.253	Dummy variable of renovation
FLOORS	5.49	5.37	1.02	0.307	Total floors
NRA	0.00040	0.00017	2.30	0.022	Net rentable area
NST	-1.40	6.98	-0.20	0.842	Distance to nearest stop
PS_5	211.43	172.01	1.23	0.220	Dummy variable of privately owned public space
SUBLET	-0.00467	0.00161	-2.90	0.004	Area available for sublet
VAC_NRA	-1513.63	503.38	-3.01	0.003	Vacancy rate
D_23_28	132.04	719.49	0.18	0.855	Battery Park or World Trade Center
D_24	-199.62	581.54	-0.34	0.732	City Hall District
D_25	31.97	494.33	0.06	0.949	Greenwich Village
D_26	-173.72	635.53	-0.27	0.785	Insurance District
D_27	-76.95	685.65	-0.11	0.911	So. Ferry Financial District
D_30	-294.66	248.73	-1.18	0.237	East Midtown South
D_31	-462.34	271.26	-1.70	0.089	Garment District
D_32	190.99	287.29	0.66	0.507	Grand Central/UN
D_33	945.40	296.22	3.19	0.002	Madison Ave
D_34	1193.76	307.70	3.88	0.000	Park/Lexington
D_35	-520.96	359.80	-1.45	0.148	Penn Station
D_36	1415.79	308.45	4.59	0.000	Plaza District
D_37	533.40	337.68	1.58	0.115	Rockefeller Center
D_38	404.06	366.63	1.10	0.271	Third Avenue
D_39_40	256.66	291.92	0.88	0.380	Square/Theatre District or West Midtown South

R-squared	0.5739	Mean dependent var	4102.7
Adjusted R-squared	0.5492	S.D. dependent var	1409

Exhibit 19: Regression with PS_G (the 4th Case)

Dependent Variable: LSLOW (low asking rent)
Method: Least Squares
Sample: 1 475
Included observations: 475

Variable	Coefficient	Std. Error	t-Statistic	Prob.	Definition of Variable
C	5988.32	488.59	12.26	0.000	Constant
AGE	-2.78	2.74	-1.01	0.311	Building age
CONTIG	0.00482	0.00178	2.71	0.007	Contiguous space for lease
D_CLS	-513.31	106.42	-4.82	0.000	Dummy variable of building class
D_GC	-2.33	2.15	-1.09	0.277	Distance to grand central
D_REN	203.60	173.85	1.17	0.242	Dummy variable of renovation
FLOORS	4.94	5.34	0.93	0.355	Total floors
NRA	0.00035	0.00017	2.03	0.043	Net rentable area
NST	-2.20	6.95	-0.32	0.752	Distance to nearest stop
PS_G	-135.52	57.15	-2.37	0.018	Dummy variable of privately owned public space
SUBLET	-0.00470	0.00160	-2.94	0.003	Area available for sublet
VAC_NRA	-1508.37	501.08	-3.01	0.003	Vacancy rate
D_23_28	137.73	716.18	0.19	0.848	Battery Park or World Trade Center
D_24	-191.10	578.13	-0.33	0.741	City Hall District
D_25	44.87	491.53	0.09	0.927	Greenwich Village
D_26	-168.09	631.61	-0.27	0.790	Insurance District
D_27	-89.36	682.11	-0.13	0.896	So. Ferry Financial District
D_30	-295.45	247.60	-1.19	0.233	East Midtown South
D_31	-451.69	269.91	-1.67	0.095	Garment District
D_32	204.82	285.87	0.72	0.474	Grand Central/UN
D_33	950.66	293.68	3.24	0.001	Madison Ave
D_34	1205.61	305.99	3.94	0.000	Park/Lexington
D_35	-517.60	357.83	-1.45	0.149	Penn Station
D_36	1401.71	307.08	4.56	0.000	Plaza District
D_37	544.56	335.66	1.62	0.105	Rockefeller Center
D_38	418.10	362.63	1.15	0.250	Third Avenue
D_39_40	258.29	290.53	0.89	0.375	Square/Theatre District or West Midtown South

R-squared	0.5778	Mean dependent var	4102.7
Adjusted R-squared	0.5533	S.D. dependent var	1409

The fourth test assigns values of 1 to 5 to dummy variable PS_G corresponding to the 1st to the 5th Kayden ratings, and assigns value of 6 to PS_G to stand for properties without privately owned public spaces. The regression result with PS_G is listed in Exhibit 19.

In the 475 observations, there are totally 68 properties (14.3%) that have privately owned public space and 407 properties that do not possess such space. PS_G is the indicator of the 1st–5th level of Kayden spaces, with 6 indicating none-Kayden properties (no privately owned public space attached). Therefore, the higher the absolute value of PS_G, the worse in terms of public space quality.

The t-stat for PS_G is –2.37, with a coefficient of -136 and a standard error of 57. It is predicted, at a 1.8% significance level, that decreasing Kayden rating by one level (increasing public space quality by one level) has a positive impact of about $1.36/sqft (a premium of 3.3%=$1.36/$41.03) to the office rent annually. The regression can explain the attributes of rent to an extent of 57.8%. In addition to the same set of statistically significant variables, NRA also appeared statistically significant in this regression.

3.3.4. Economic Explanations and Major Variables

In summary, the above regression analyses result in positive conclusions. It has already been clarified that the Kayden properties are the only properties with privately owned public space in the 475 data sets. Therefore, as summarized in Exhibit 20, regression

models with PS_3, PS_4 and PS_G indicate that privately owned public space does indeed add value to office rent.

Exhibit 20: Coefficient of the Public Space Vectors				
	PS_3	PS_4	PS_5	PS_G
Coeff.	505	386	211	-136
T-stat	2.68	2.19	1.23	-2.37
Prob.	0.8%	2.9%	22.0%	1.8%
Premium	12.3%	9.4%	5.1%	-3.3%

As a reminder, the overall annual mean rent of these 475 properties is $41.03/sqft. On average, for each level decrease of Kayden rating (increase of public space quality), there is approximately $1.36/sqft value added to the rent annually.

Furthermore, for spaces with 1^{st} –3^{rd} Kayden ratings, including destination space, neighborhood space and hiatus space, the value added is approximately $5.05/sqft annually. For spaces with 1^{st} –4^{th} Kayden ratings, the value added is $3.86/sqft.

From the above regressions, some variables can also be distinguished from others, given that they are statistically significantly correlated with the office rent. The following 7 variables are constantly significant: CONTIG (contiguous space for lease), D_CLS (office class), SUBLET (space available for sublet), VAC_NRA (vacancy rate), D_33 (Madison Ave), D_34 (Park/Lexington), and D_36(Plaza District). NRA (net rentable area) appeared statistically significant in the regressions with PS_4, PS_5 and PS_G. Exhibit 21 shows the coefficients of each variable from these 4 models.

Exhibit 21: Mean of the Other Regression Coefficients (Cents)					
	PS_3	PS_4	PS_5	PS_G	Mean
C	5218	5149	5212	5988	5392
AGE	-3	-3	-4	-3	-3
CONTIG (E-04)	48	46	46	48	47
D_CLS	-520	-509	-503	-513	-511
D_GC	-2	-2	-2	-2	-2
D_REN	231	200	201	204	209
FLOORS	6	5	5	5	5
NRA (E-04)	3	4	4	4	4
NST	-2	-2	-1	-2	-2
SUBLET	-48	-48	-47	-47	-47
VAC_NRA (E+02)	-15	-15	-15	-15	-15
D_23_28	127	166	132	138	141
D_24	-217	-194	-200	-191	-200
D_25	28	48	32	45	38
D_26	-192	-176	-174	-168	-177
D_27	-94	-99	-77	-89	-90
D_30	-296	-266	-295	-295	-288
D_31	-461	-427	-462	-452	-451
D_32	185	239	191	205	205
D_33	913	981	945	951	947
D_34	1179	1249	1194	1206	1207
D_35	-522	-485	-521	-518	-512
D_36	1412	1444	1416	1402	1418
D_37	510	565	533	545	538
D_38	428	482	404	418	433
D_39_40	241	279	257	258	259

The economic explanation of these statistically significant factors is the following. On average, every 10000 sqft more of contiguous space available to lease will increase value of about $0.47/sqft annually. One level higher (better quality) of office class will increase the rent about $5.11/sqft. Every 10000 sqft more of net rentable area will add value to rent of about $0.04/sqft. Every 10000 sqft more of space to sublet will reduce value of about $0.47/sqft. One percentage increase of vacancy rate will reduce value of about $0.15/sqft.

Being in the Madison Avenue sub-market can add value of $9.47/sqft to the office rent relative to the Columbus Circle submarket. Being in the Park/Lexington sub-market can add value of $12.07/sqft, and in the Plaza District $14.18/sqft.

These statistically significant variables also provide a foundation for further examination of the 68 Kayden properties.

3.3.5. Processing of 66 Observations

The purpose of the second hypothesis test is to see whether higher quality public spaces add more value to office rent by a regression on the 68 Kayden data sets. Among these 68 Kayden data sets there are only 2 properties[31] that are class B office properties. Therefore, these two observations are discarded. The remaining 66 Kayden properties are the target of the regression analysis.

Given the small sample size, the number of independent variables should also be reduced. In particular, the 18 sub-markets could be merged into several larger groups. Exhibit 22 lists the mean rent and observations of different sub markets among the 66 properties.

[31] Kayden ID 36- Wheaton ID 256128, and Kayden ID 54- Wheaton ID 242142.

D_29, Columbus District, has the average observations as well as mean rent among these sub-markets, and thus was used as the basis for regression again. Based on that, as shown in Exhibit 23, 4 larger groups were composed according to their geographic locations.

Exhibit 22: Mean Rent of the 18 Sub-Market among the 66 Kayden Properties

Sub-market ID	Sub #	Sub-Market Name	Major Market	Properties	Mean Rent
NYO0436	D_36	Plaza District	Midtown	8	7413
NYO0439	D_39	Time Square/Theatre District	Midtown	4	7050
NYO0433	D_33	Madison Ave	Midtown	3	6683
NYO0434	D_34	Park/Lexington	Midtown	6	6117
NYO0438	D_38	Third Avenue	Midtown	9	5678
NYO0428	D_28	World Trade Center	Downtown	1	5500
NYO0432	D_32	Grand Central/UN	Midtown	7	5479
NYO0437	D_37	Rockefeller Center	Midtown	4	5125
NYO0429	D_29	Columbus Circle	Midtown	5	4620
NYO0435	D_35	Penn Station	Midtown	1	4100
NYO0426	D_26	Insurance District	Downtown	2	3975
NYO0423	D_23	Battery Park	Downtown	1	3900
NYO0427	D_27	So. Ferry Financial District	Downtown	11	3573
NYO0430	D_30	East Midtown South	Midtown	3	3367
NYO0431	D_31	Garment District	Midtown	1	2900
NYO0424	D_24	City Hall District	Downtown	0	0
NYO0425	D_25	Greenwich Village	Downtown	0	0
NYO0440	D_40	West midtown south	Midtown	0	0

Exhibit 23: Group Composition, Number of Observations & Mean Rent

	D_GRP1	D_GRP2	D_GRP3	D_GRP4
Sub-market ID	23,26,27,28	31,35,37,39	33,34,36	30,32,38
# Observations	15	10	17	19
Average of mean rent	4237	4794	6738	4841

3.3.6. Hedonic Pricing of the 66 Observations

Similar as the hedonic pricing of the 475 observations, the 66 observations were also examined to see whether higher quality public spaces add more value.

$$LSLOW = \alpha_1*AGE+ \alpha_2*CONTIG+ \alpha_3*D\_CLS+ \alpha_4*D\_GC+ \alpha_5*D\_REN+ \alpha_6*FLOORS+ \alpha_7*NRA+ \alpha_8*NST+ \alpha_9*PS\_3+ \alpha_{10}*SUBLET+ \alpha_{11}*VAC\_NRA+ \alpha_{12}*D\_GRP1+ \alpha_{13}* D\_GRP2+ \alpha_{14}* D\_GRP3+ \alpha_{15}* D\_GRP4+ \varepsilon$$

Exhibit 24: Definition of the Variables in the Hedonic Pricing Equation	
Abbreviation	Definition
LSLOW	Low asking rent
AGE	Building age
CONTIG	The area of contiguous space for lease
D_CLS	Dummy variable of building class (A=1, B=2, C=3)
D_GC	Distance to grand central
D_REN	Dummy variable of renovation, renovated=1, non-renovated=0
FLOORS	Total floors
NRA	Net rentable area
NST	Distance to nearest stop
PS_3	Dummy variable of privately owned public space PS_3=1 if rated "destination", "neighborhood" or "hiatus", otherwise PS_3=0
SUBLET	Area available for sublet
VAC_NRA	Vacancy rate
D_GRP1	Sub-market numbered 23,26,27,28
D_GRP2	Sub-market numbered 31,35,37,39
D_GRP3	Sub-market numbered 33,34,36
D_GRP4	Sub-market numbered 30,32,38

The regression results with PS_3, PS_4 and PS_G are attached in Exhibit 25-27. Due to the small sample size, none of the coefficient of these factors is statistically significant. However, the magnitude of the coefficient of PS_3, PS_4 and PS_G aligns very much with the regression result from the 475 observations. Among other variables VAC_NRA (vacancy rate), and D_GRP3 (D_33, 34 and 36) are identified as statistically significant.

Actually, the question, which the regressions with the 66 observations were trying to answer, has already been answered by the regression on the PS_G vector with the 475 data sets. The result is a $1.36/sqft premium for each level higher of quality in the privately owned public space.

Exhibit 25: Regression with PS_3 (the Primary Case)
Dependent Variable: LSLOW (low asking rent)
Method: Least Squares
Sample: 1 66
Included observations: 66

Variable	Coefficient	Std. Error	t-Statistic	Prob.	Definition of Variable
C	5357.02	1893.65	2.83	0.007	Constant
AGE	-27.99	27.93	-1.00	0.321	Building age
CONTIG	0.01150	0.00725	1.59	0.119	Contiguous space for lease
D_GC	-15.02	11.44	-1.31	0.195	Distance to grand central
D_REN	969.58	663.11	1.46	0.150	Dummy variable of renovation
FLOORS	39.92	23.08	1.73	0.090	Total floors
NRA	-0.00036	0.00058	-0.61	0.542	Net rentable area
NST	-52.50	33.46	-1.57	0.123	Distance to nearest stop
PS_3	567.32	413.71	1.37	0.176	Dummy variable of privately owned public space
SUBLET	-0.00051	0.00500	-0.10	0.919	Area available for sublet
VAC_NRA	-8313.12	3355.52	-2.48	0.017	Vacancy rate
D_GRP1	4142.70	3775.56	1.10	0.278	Sub-market numbered 23,26,27,28
D_GRP2	385.13	824.71	0.47	0.643	Sub-market numbered 31,35,37,39
D_GRP3	1922.67	802.2485	2.396601	0.0203	Sub-market numbered 33,34,36
D_GRP4	923.79	867.39	1.07	0.292	Sub-market numbered 30,32,38

R-squared	0.5777	Mean dependent var	5318.9
Adjusted R-squared	0.4618	S.D. dependent var	1698

Exhibit 26: Regression with PS_4 (the 2nd Case)
Dependent Variable: LSLOW (low asking rent)
Method: Least Squares
Sample: 1 66
Included observations: 66

Variable	Coefficient	Std. Error	t-Statistic	Prob.	Definition of Variable
C	5909.51	1885.95	3.13	0.003	Constant
AGE	-38.31	26.83	-1.43	0.160	Building age
CONTIG	0.00904	0.00722	1.25	0.216	contiguous space for lease
D_GC	-17.71	11.50	-1.54	0.130	Distance to grand central
D_REN	815.04	671.19	1.21	0.230	Dummy variable of renovation
FLOORS	33.94	22.99	1.48	0.146	Total floors
NRA	-0.00011	0.00055	-0.19	0.849	Net rentable area
NST	-43.70	33.11	-1.32	0.193	Distance to nearest stop
PS_4	350.13	476.71	0.73	0.466	Dummy variable of privately owned public space
SUBLET	-0.00063	0.00507	-0.12	0.902	Area available for sublet
VAC_NRA	-7801.24	3382.89	-2.31	0.025	Vacancy rate
D_GRP1	4831.58	3830.17	1.26	0.213	Sub-market numbered 23,26,27,28
D_GRP2	259.05	836.14	0.31	0.758	Sub-market numbered 31,35,37,39
D_GRP3	1878.26	814.25	2.31	0.025	Sub-market numbered 33,34,36
D_GRP4	811.62	886.22	0.92	0.364	Sub-market numbered 30,32,38

R-squared	0.5667	Mean dependent var	5318.9
Adjusted R-squared	0.4478	S.D. dependent var	1698

Exhibit 27: Regression with PS_G (the 3rd Case)
Dependent Variable: LSLOW (low asking rent)
Method: Least Squares
Sample: 1 66
Included observations: 66

Variable	Coefficient	Std. Error	t-Statistic	Prob.	Definition of Variable
C	6825.75	1775.80	3.84	0.000	Constant
AGE	-34.53	27.12	-1.27	0.209	Building age
CONTIG	0.01092	0.00729	1.50	0.140	Contiguous space for lease
D_GC	-16.75	11.38	-1.47	0.147	Distance to grand central
D_REN	883.38	664.05	1.33	0.189	Dummy variable of renovation
FLOORS	32.43	22.92	1.41	0.163	Total floors
NRA	-0.00025	0.00057	-0.44	0.664	Net rentable area
NST	-44.25	32.52	-1.36	0.180	Distance to nearest stop
PS_G	-183.94	176.07	-1.04	0.301	Dummy variable of privately owned public space
SUBLET	-0.00029	0.00505	-0.06	0.954	Area available for sublet
VAC_NRA	-8230.90	3383.21	-2.43	0.019	Vacancy rate
D_GRP1	4457.93	3816.17	1.17	0.248	Sub-market numbered 23,26,27,28
D_GRP2	345.48	829.78	0.42	0.679	Sub-market numbered 31,35,37,39
D_GRP3	1831.28	803.97	2.28	0.027	Sub-market numbered 33,34,36
D_GRP4	805.51	863.35	0.93	0.355	Sub-market numbered 30,32,38

R-squared	0.5713	Mean dependent var	5318.9
Adjusted R-squared	0.4537	S.D. dependent var	1698

3.4.Regression Result

In summary, the regression analyses on the 475 observations lead to reasonable conclusions.

By Kayden's definition, the 4th rated spaces are circulation spaces "that materially improve the pedestrian's experience of moving through the city", and the 5th rated spaces are marginal spaces "that lacking satisfactory levels of design, amenities, or aesthetic appeal, deters members of the public from using the space for any purpose".

The regression result indicates that 1st –3rd rated Kayden spaces can add value to office rent at about $5.05/sqft annually. For spaces with 1st –4th Kayden ratings, the value added could be $3.86/sqft. On average, for each level decrease of Kayden rating (each level increase of public space quality), there is approximately $1.36/sqft value added to office rent annually.

From the regressions, some variables were also distinguished from others, given that they are statistically significantly correlated with the office rent. The following 7 variables are constantly significant: CONTIG (contiguous space for lease), D_CLS (office class), SUBLET (space for sublet), VAC_NRA (vacancy rate), D_33 (Madison Ave), D_34 (Park/Lexington), and D_36(Plaza District). NRA (net rentable area) is statistically significant in most of the cases.

Specifically, the area of the contiguous space available to lease and the total net rentable area are positively correlated to office rent; while the office quality measured by class grade, vacancy rate, and the space available for sublease, are negatively correlated with office rent. Relative to sub-market 29 (Columbus Circle), being located in the sub-markets like Madison Ave, Park/Lexington, and Plaza District can also add premium to the rent of office space.

Therefore, regression models indicate that having a privately owned public space with better quality or maintenance, like destination space, neighborhood space, hiatus space or circulation space does indeed add value to office rent as compared to the existence of a marginal space or no public space at all.

4. Speculations on the Result

4.1.Examining from Developer's Perspective

4.1.1. An Attractive Trade Off

The mechanics of zoning incentives are geared toward financial or design interest of the developers. "Floor area bonuses and non-floor area incentives benefit developers by either increasing their income or reducing their costs. For example, the floor area bonus increases a building's cash flow or value through rental or sale of the extra space. Frequently, the ability to develop extra space allows the building to be taller, and the higher-story floors may be rented or sold at higher rates."[32] Non-floor area incentives may offer more flexibility to align design with the market tastes, or may decrease construction costs.

In exchange, the developer agrees to contribute a portion of its lot or building to the City as a privately owned public space, construct and maintain the space according to the zoning and legal actions, and allow access to and use of the space by the public. As proved by the proliferation of the privately owned public spaces, the trade off appears very attractive to developers.

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[32] Kayden, p.23.

4.1.2. The Evolution of Legal Actions

For each type of the spaces, the Zoning Resolution has set forth specific standards for space location, size, shape, materials, amenities, accessibility, and maintenance. The legal requirements governing the design and operation are formed not only at the proposition, approval and construction stage; subsequent legal actions may amend such requirements, usually in response to a request from the owner to a relevant City agency for a change in the rules. Such requests generally fall into four categories: installation of open-air cafes and kiosks, nighttime closings, design changes, and size reductions.

Because the public space standards in the Zoning Resolution have evolved through amendments over the years, current text does not necessarily reflect the nature of developers' original legal obligations. Therefore, up-to-date information is of crucial importance in the implementation.

4.1.3. Implication of the Statistical Result

As mentioned in the introduction part, for the developers there was virtually nothing to lose and everything to gain by providing privately owned public spaces. Just as demonstrated by the proliferation of the "as-of-right" plazas and arcades, developers has followed the instinct of any businessmen in maximizing their profit of development by

exchanging the public spaces for more zoning bonus. For them, as long as the value of the incentive equaled or exceeded the cost of providing the public space, the transaction would be a financially desirable one.

It is obvious that developers have been aware of many of the benefits of the trade off, including (1) the extra rent brought about by the bonused floor area, (2) the premium in rent that they can charge on these bonused areas which are often at the top floors of their properties, (3) the flexibility to align design with market taste, and (4) the possible deduction in construction cost.

However, there is one significant point that they haven't been aware of which is disclosed by the result of the hedonic pricing analyses: constructing a privately owned public space is not merely an trade off; in fact, the space itself can generate value that is much greater than that of the bonused floor area. Even without any bonus from the City, its construction still deserves a serious consideration.

The remaining question is whether developers were able to predict at the beginning stage of their development that good quality privately owned public spaces adds almost a 12.3% premium to the office rent, while marginal spaces add no extra value at all.

The economic difference of these two options is obvious. With a marginal space, a developer could only get the extra value brought about by the incremental bonused floor

areas, while with a good quality public space, he could obtain a $5.05/sqft (12.3% premium) in rent for each square foot of his entire building, in addition to the same benefit as that of the prior option. Any businessmen with common sense would be able to make the correct judgment on that.

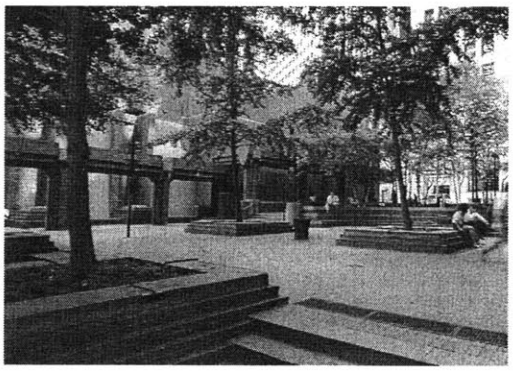
Had they been aware of this, would they have higher incentive to invest more money in the design and construction of their plazas?

Even if the City withdraws the incentive, the statistical results of this research are still valuable references in the decision-making process of any development regarding whether or not to construct privately owned public spaces.

4.2.Examining from Owner's & Tenant's Perspective

4.2.1. Public Image and Marketing Effect

Property owners always recognize the cost related to the maintenance of privately owned public spaces. However, they have ignored many of the benefits both measurable and non-measurable.



Urban plaza at Barclays Bank.
Source: Kayden, p. 27.

The pleasure brought about by a favorable public space may contribute to the productivity of the enterprise housed in the structure. Well-maintained public space can also serve as a symbol of the building and a marketing function of the tenants.

For example, a pleasant public space can bring about a delighted mood to employees and give them a more optimistic attitude toward difficulty. It can serve as an ideal lunch and social venue, which saves time for employees from going to distant places, and thus improve efficiency of the tenant. A favorable public space can often become a destination for people from the surrounding neighborhood to gather.

Furthermore, properties with good quality privately owned public space attached to them present themselves to the society with a better image, symbolizing a spirit of loving care for the human being and a stance of generous contribution to the welfare of the public. Firms and individuals may also derive "status" from occupying a property with a popular public space. Therefore, the landlord can charge a premium for the aforementioned benefits that cannot be provided otherwise.

From tenant's perspective, leasing office space at a prestigious property with favorable privately owned public space at the ground level can also have multi-faceted benefits. For tenants with publicly visible brand names, comparable property representation will be sought as a marketing effect as mentioned in the previous paragraph. In addition, good quality privately owned public space provides a good locale for employee's social

activities during work breaks. Finally, if a property were attached by a privately owned public space not sufficiently and properly maintained, tenants could lock in a long-term lease at a relatively low rent level, and at the same time seek to compel the owner for better maintenance by resorting to legal provisions as well as the statistical results of this research.

4.2.2. The Added Value to Property

The impact of good quality public space as a favorable public image and effective marketing highlight are well noticed. However, the economic impact of owning a well maintained public space has not yet been examined before. From the hedonic pricing models tested in the previous sections, it is clear that good quality privately owned public space can not only benefit the public sector, but also the owner of the property on the private side, by adding extra value to the office rent.

This result is encouraging, given that property owners will not look on maintenance of the public space as a pure obligation or burden any more. On the contrary, they will have more incentive to maintain the spaces and even make them better. Also, when it is time to sell the property, the added value in the future cash flows, in terms of rent, can be transformed into an extra amount of the present value of the property.

Since there is no reliable data, the magnitude of the premium in property value is not further calculated in this thesis. However, the positive result of the rental hedonic pricing does proves that well maintained privately owned public space indeed adds value to the property it is attached to, in addition to the bonused floor area it brought about at the initial development stage.

The 12.3% premium in rent as an indicator of the economic benefit of possessing a good quality privately owned public space, can entice owner's appreciation for better quality and their motivation for better maintenance of these privately owned public spaces. The maintenance of privately owned public spaces is no longer a simple obligation, but instead, a value-adding work. Owners can always ask for a premium for the high quality of their spaces in office rent or in sales price.

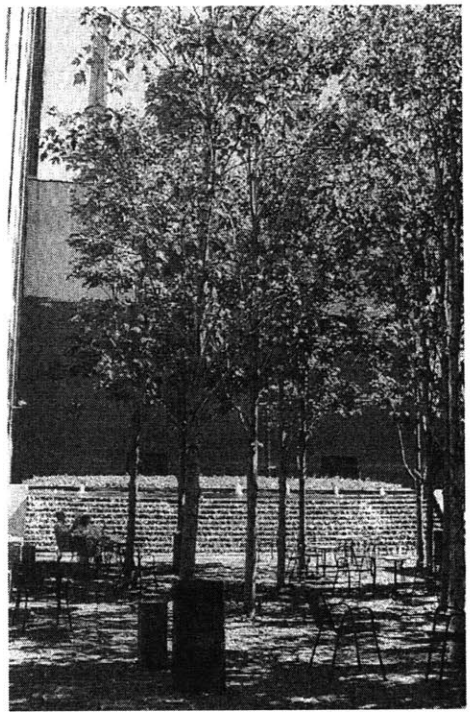
From tenants' perspective, as long as they value the prestigious image, marketing effect, and favorable amenity, they will find the premium in rent worthwhile. In case they desire a privately owned public space, but would like to pay less premium, they can try to lock in a long-term lease before the situation of the space is improved and rent increased, as mentioned in the previous section.

4.3.Examining from Urban Designer & Planner's Perspective

4.3.1. Importance of Detailed Regulation

According to Kayden's rating, of the 167 plazas built before 1975, 63% are marginal spaces that are unusable, unaesthetic, and/or ill-situated, most of which produced under the minimal legal standards governing the design of "as-of-right" plazas. This record demonstrates that a plaza could at once satisfy the "letter of the law" and yet not usable.

The 1961 Zoning Resolution bears considerable responsibility for this result, due to the lack of sufficient design requirements. Furthermore, it should as well be responsible for the random distribution of these "as-of-right" plazas, most of which are situated haphazardly without due regard for their urban context.



Customized public space at One East River Place. Source: Kayden, p. 38.

In fact, it is legitimate to question whether the goal of light and air that underlies the plaza legislation was appropriate in every framework. For instance, "'contiguous plazas which totally obliterate the street wall' may be especially harmful to street vitality."[33]

[33] Kayden, p.54.

The urban plazas produced after the zoning reforms of 1975 are noticeably better in terms of use and urban fit. The amendments legislated new, detailed design requirements, governing location, orientation, shape, proportion, elevation, functional and aesthetic amenities, and public identification. As a result, according to Kayden's surveys, the post-1975 outdoor spaces showed a substantially greater number of users compared with previously provided spaces. Lessons from the "as-of-right" plazas illustrate the important role of detailed regulation in the implementation of any urban policies.

4.3.2. Necessity of Review & Amendment

The innovative work of William Whyte[34], the urban sociologist, who commenced studies on public spaces in 1970 under the Street Life project, played a major role in the 1975 amendment of the City's zoning policies. Whyte and his researchers walked around the city and watched what people did in the spaces attached to office buildings. They employed time-lapse photography, user interviews, and statistical compilations, to analyze what made these small public spaces succeed or fail.

The 1975 zoning amendment implemented the first major revision to the "as-of-right" plazas, imposing higher design standards, mandating functional amenities, and inaugurating a special administrative review procedure. "'For the use and enjoyment of

[34] Whyte, p. 8, 10.

large numbers of people,' became the touchstone for specific design and amenities requirements that expressly remedy the failures of many existing plazas." [35]

The Zoning Amendment also took measures regarding the distribution of new urban spaces. It tightened the rules for urban plazas, reducing the bonus and adding new locational restrictions. Finally in 1996, "the Commission formally concluded the 'as-of-right' plaza's long run by expressly proscribing new ones."[36]

The understanding of the relationship between privately owned public space and the members of the public can aid a policy maker in retrospection of the zoning resolutions and result in prompt adjustments to further accomplish the City's original purpose. Periodic review and revision of the legal actions is crucially important for the improvement of any urban policy, in order to guarantee a better outcome. The nature of the 1961 zoning resolution determined the subsequent problems in terms of public space distribution, design, operation, and maintenance. Therefore, the 1975 amendment was particularly meaningful in enhancing the effectiveness of the regulation.

4.3.3. Market Determination vs. Master Plan

The origination of the privately owned public space was essentially guided by the affirmative strategy of the City regarding urban regulation issues. Instead of allocating

[35] Kayden, p.17.
[36] Kayden, p.19.

public spaces according to a deliberate master plan, and requiring developers to follow the City's arrangement, the City simply allowed the discretion of market economy and the judgment of the developers to act.

"As a public-private partnership driven primarily by real estate economics and the market, this technique is effective only where developers want to construct buildings larger than that allowed by the base zoning floor area ratio."[37] The policy exemplifies exactly how the City has been leveraging the market demand to generate benefits for the public.

Open air concourse at Citigroup Center.
Source: Kayden, p. 32.

However, there are certain drawbacks that are inevitably tied to this market driven nature, like exemplified by the random distribution of the spaces. "The Zoning Resolution never introduced, let alone imposed, a master plan for all privately owned public spaces."[38] It permitted developers to secure floor area bonuses for "as-of-right" spaces, without precise locational prescriptions or discretionary reviews.

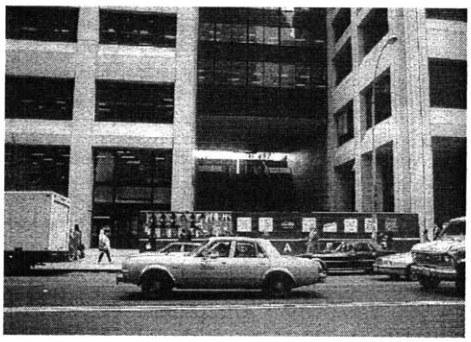
Had the initial regulation strategy been negative instead of affirmative, in other words, requiring instead of merely encouraging developers to provide privately owned public spaces guided by a systematic master plan, a better result might be achieved. Of course,

[37] Kayden, p.45.
[38] Kayden, p.46.

public-private partnership is not as simple and easy to foster as what mandatory command can realize. There is certain difficulty in conducting the master plan of open space system, especially when a developer's identity and financial situation is unclear and surrounding building's physical forms are also undecided.

4.3.4. Vital Role of Legal Enforcement

The creation of privately owned public spaces has been secured almost entirely by the market-driven nature of incentive zoning. This nature not only led to the uneven quality and random distribution of the spaces generated, but also certain operational problems. The inherent tension between private and public interests always tempted private owners to elevate private interest above the public.



Regularly undergoing repair at 55 water street. Source: Kayden, p. 56.

"The Zoning Resolution requires privately owned public spaces to host "public use", but never expressly defines what limits, if any, an owner may impose on such public use." [39]According to Kayden, The Department of City Planning did allow an owner to prescribe "reasonable"[40] rules of conduct, generally guided by the rules of conduct applicable in City-owned parks.

[39] Kayden, p.38.
[40] Kayden, p.38.

Although the zoning stipulates certain requirements of maintenance regarding "litter control, care of vegetation, and oversight of permitted obstructions,"[41] compared to the detailed articulation of design standards, the Resolution is far less explicit and precise in the operation standards of the spaces.

Cars parked in arcade at 160 Water Street.
Source: Kayden, p. 57.

As a result, according to Kayden, almost half of all buildings with public spaces in 1998 and 1999 are apparently not in compliance with applicable legal requirements. In some cases owners have effectively privatized public space such that public use and enjoyment are diminished or prevented. "Privatization mechanisms implicating legal compliance concerns typically falls into three specific areas of public space operation: denial of public access, annexation for private use, and diminution of required amenities."[42] The owner benefits from the financial value of the bonused floor area; while the public loses the corresponding right they are entitled.

Café creep at 55 Broad Street.
Source: Kayden, p. 57.

[41] Kayden, p.38.
[42] Kayden, p.56.

Rather than counting on the initiative of owners, the enforcement by law would be key determinant of quality. The law governing the design and operation of the spaces is not only codified in the Zoning Resolution, but also resides in the thousands of legal instruments, like special permits, certifications, authorizations, modifications, variances, restrictive declarations, performance bonds, and approved plans.

Detailed documentation and public accessibility of related information will be imperative in assisting public inspection and consequently achieving a better quality of these privately owned public spaces. The statistical result of this thesis is also helpful in fundamentally changing the owners' attitude toward the operation and maintenance of the spaces.

4.3.5. Documentation & Public Awareness

"Legal enforcement of the rules governing a privately owned public space may proceed through civil or criminal action, although civil actions are typically the preferred approach."[43]

According to Kayden, for non-hazardous violations, if the owner admits and cures the violation within 35 days and a certificate of correction is filed, no penalties are imposed.[44] Alternatively, the owner may choose a stipulation of settlement, in which it admits to the existence of the violation and agrees to pay a civil penalty. A criminal action in state court

[43] Kayden, p. 40.
[44] Building Code 26-126.2.

may also be pursued by the Department of Buildings to enforce the Zoning Resolution. An owner whose public space violates the general provisions of the Zoning Resolution is guilty of a misdemeanor and may be ordered to pay a fine and /or serve jail time. [45] Failure to comply with conditions or restrictions in special permits, variances, authorizations, or certifications may also constitute the basis for denial or revocation of the owner's building permit or certificate of occupancy, or the revocation of the special permit, variance, authorization, or certification. [46]

Members of the public may be able to bring a lawsuit in cases where the design and/or operation of the public space allegedly violates the Zoning Resolution if they can establish that they have suffered special damage.

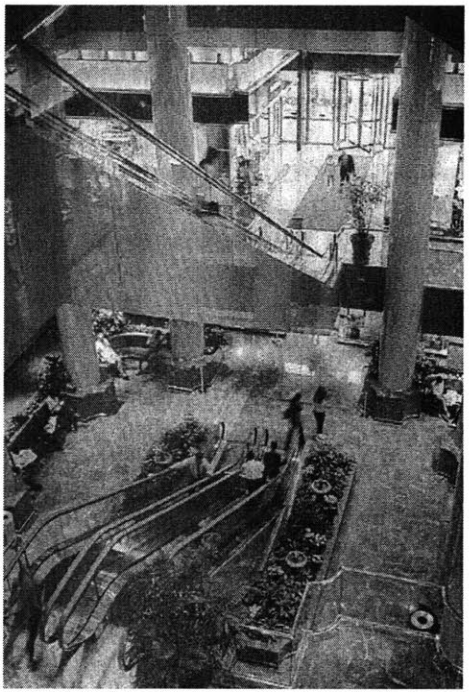
In this regard, accessible, transparent, up-to-date, and accurate data describing the legal obligations for each privately owned public space are an essential component of public space enforcement efforts. Professor Kayden has contributed a lot of efforts in this direction, which established a good foundation for future works.

Elevated plaza at 55 Water Street.
Source: Kayden, p. 36.

[45] Zoning Resolution, Section 11-61; Building Code 26-126(a).
[46] Kayden, p. 41.

4.3.6. Summary Evaluation

Since the launch of the incentive zoning, the City of New York has awarded more than 20 million square feet of floor area bonuses and other regulatory concessions. The policy has been effective in shaping the physical envelope at the street level and has yielded a remarkable quantity of public space. However, it failed to produce a similarly remarkable quality.



Covered pedestrian space at 575 Fifth Avenue. Source: Kayden, p. 33.

Evaluation of the City's practice of incentive zoning usually starts with the question of whether the overall benefits to the public exceed the overall costs to the public. Although the benefits of privately owned public space are evident, the social costs arise from the greater congestion, the increased demand on private and public services, and the sacrifice of light and air at street level, could also not be easily ignored.

Through block galleria at 1325 Sixth Avenue. Source: Kayden, p. 36.

A further question, as also pointed out by Kayden, is whether the term of the incentive is economic or efficient in its exchange for the public spaces. In

other words, gauging by financial criteria, whether the amount of the floor area bonuses has been sufficiently calibrated such that it has not been excessive than the necessary level, and still being attractive. "Would private developers have been willing to accept smaller floor area bonuses and still furnish the same number and quality of privately owned public spaces?"[47] The overall comparison of costs and benefits and the subsequent adjustment is another interesting topic worthy of further examination.

Finally, incentive zoning, as a form of public-private partnership, can never get rid of its market-driven nature. There is certainly economic sense behind the mechanism, which has been proven by the proliferation of the privately owned public spaces in Manhattan. However, the uneven distribution of the spaces, and the unsatisfactory quality and operational problems appeared in many of the cases have also disclosed some drawbacks of this policy. Of course, every thing has two sides, and there is no way simply to take the upside without risking the downside. Had it not been for this incentive strategy, the City may not even be able to generate as many public spaces as it has.

On the other hand, incentive zoning has been broadly applied to many other cities in the United States, and has been an enlightening method actively studied by other countries. Therefore, it is necessary to take some time and reflect more on the problematic sides and explore possible solutions of improvements.

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[47] Kayden, p.43.

For instance, even if a systematic master plan might not be pragmatic, could some rough planning at the early stage be helpful in guiding the distribution of the public spaces? Furthermore, how to utilize the geographic information system and database to archive as well as update the legal documentations associated with each space also deserves extra research effort. Regarding the operation of the space, hopefully the statistical result of this thesis could be of assistance to the planning committee in calibrating the bonus to the appropriate level, as well as enticing developers' motivation for better design and maintenance.

In some other countries where planned economy still dominates, the negative strategy might be an alternative for the incentive zonings' affirmative strategy. When government has stronger power, many actions could be imposed and put under the control of the public sector. There is certainly considerable cost related to that kind of method, given the absence of the market system and the distortion of basic economic principles. In any particular case, customized solution need to be explored, which could be a combination of the negative and affirmative strategy, in order to assure the best outcome.

4.3.7. Implication of the Regression Result

Incentive zoning has been used not only in New York City, but also in Hartford, San Francisco, and Seattle. The previous chapters have examined the possible impacts of the regression result of this thesis from the owners', tenants', as well as developers'

perspective. As for planners and urban designers, the empirical analysis might also be valuable regarding their future policy making.

First of all, the statistical result is powerful evidence in convincing and enticing private developers' better commitment in the design and maintenance of the spaces. Even without the incentive, providing privately owned public space itself brings very attractive economic benefit to the properties. Secondly, although there is no cost analysis, the benefit analysis is a good foundation for the City's further research, in order to calibrate the bonus to the correct level and better facilitate similar practice in other places. Last but not the least, the reflections on the practice of incentive zoning may be a good starting point for further valuable research, which would lead to more effective urban regulation in other cities.

5. Conclusion

This thesis attempted to examine the Incentive Zoning Policy from the economic and urban perspective and reached the following conclusions:

1. From the urban perspective, incentive zoning is very effective in shaping the street envelop at street level in dense areas in Manhattan, as well as secure numerous privately owned public spaces.

2. Due to the market-driven nature of the policy, there are consequential problems associated with incentive zoning policy, namely, the uneven allocation of public spaces, the unsatisfactory quality of design and operation, and the increasing trend of privatization.

3. Regarding the progressive practice and implementation of this policy, the opportune amendment of the legal rules governing the design and operation of the privately owned public space, and the timely proscription of certain types of spaces, like the "as-of-right" plaza, was instrumental in assuring a better quality of the outcome. The effectiveness of any policy needs to be examined by time and practice, and then adjusted accordingly. Continued retrospection and revision is a vital step to guarantee the final achievements.

4. Well recorded and updated legal documentation of the zoning provisions and subsidiary information is of crucial value both for public inspection and for owners' own reference concerning their obligations. Advanced technology such as the geographical information system together with a database can make the tracking and searching process much easier and more publicly accessible than any previous decades.

5. The statistical result from the empirical analysis of this thesis provided solid evidence that office buildings with favorable privately owned public spaces are predicted to extract $5.05/sqft more in annual rent, a premium of 12.3% over the $41.03/sqft average rate. Based on the rating system defined by Jerold Kayden, on average, for each level increase of quality, there is $1.36/sqft of value (a premium of 3.3%) added to the annual rent, which can further be translated into a premium in the proceeds when properties are sold. This benefit should be separated from the original benefit of extra rent associated merely with the bonused floor area, which at the most amounts to 1/5 of the total rentable area.

6. This statistical result can bring about fundamental change to private sector's attitude toward dealing with the design and operation of privately owned public space. Developers and owners should find a higher incentive to commit more resources to the design, operation, and maintenance. For the policy maker, this

result can also be a good starting point in further reflection on how to calibrate the bonus to the appropriate level, as well as how to employ the result more effectively in the promotion and extension of the policy.

7. Comparison of the initial affirmative strategy of the incentive zoning with the alternative negative strategy was also carried out. Considering market demand and financial capacity of the developers, encouraging instead of requiring them to provide public accessible spaces within their property has its legitimate economic reasons. For future application in other cities, where a different market as well as municipal situation may exist, a combination of the two strategies perhaps deserves a trial, so as to take full advantage of the planning power and provide a better result.

6. Potentials Not Yet Explored

1. Contributing Features of Successful Public Spaces

Although this thesis explored the added value brought about by the existence of a privately owned public space, it did not provide gradations that clarify the incremental value added due to increased quality in different features of a public space, nor did it provide any indication of the numerous dimensions of the different features which typically underlie the overall quality of a public space. Although it is very difficult to separately identify and quantify the impact of each of the attributes, some behavioral research would still be helpful in assessing the qualitative features that could strengthen the amenities of the public spaces. It will be a valuable reference for urban designers and developers.

2. Externality of Landmark Public Spaces

Regarding those highly successful privately owned public space, like the destination and neighborhood spaces, a further inquiry could be the magnitude of their landmark effect. In other words, how much in terms of added value can they bring to the nearby properties, or in short, the externality effect of these successful spaces. To do this we would need rental rates and property information of many of the surrounding properties, which is likely to be difficult to obtain.

However, this research will be very helpful for the policy maker for the construction of further regulation.

3. Developer's Initial Motivation and Expectation

As discussed in previous chapter, the immediate benefit of zoning incentive was obvious to developers, which has been further confirmed by the proliferation of the privately owned public spaces. However, it was not clear whether developers possess any motivations beyond the bonus. Did they only expect higher FAR from the construction of the public space, or did they also have the hunch of a higher rent level and market value of the property after completion? Surveys of these developers' initial motives would be helpful to the policy maker and facilitate future decision-making.

4. Maintenance Cost of the Public Spaces

Besides the added value calculated, there is also a question as to whether these places are paying for themselves. The property at 590 Madison Ave. has an added annual rent of $4.19 million (5.05*830052). Since there is no information about the total area of the public space, the author used the zoning lot area of 49200 to the estimate the sum notionally available to offset the maintenance costs. This gives an allowance of $85.2/sqft maintenance expense for the public space annually, much higher than the necessary expense, considering the base level of a $43.01/sqft annual office rent. Further research could be geared toward comparing the actual maintenance cost of the privately owned

public space with the added value to all the floor area, and see how much excess value in terms of rent is added to the property after deduction of the maintenance cost, so that a blended IRR could be further calculated. This test may provide further support to convince owners of the economic benefit of the privately owned public spaces, and thus encourage better maintenance.

5. Increased Property Tax due to the Added Value in Rent

Despite the added value in rent, there is another concern that hasn't been fully addressed from the owners' perspective, the property tax issue. It is a common practice that property tax is charged proportionally to property value, which in essence is closely tied to rental rate. A higher level of rental rate can increase the rental cash flow, and thus the property value of the building, at the same time it will also increase the property tax obligation of the owners. Therefore, it is a double edge sword, and only one side of it has been examined in this thesis. Further research could attempt to find the balance line where the increased profit from rent would be exactly offset by the rise in property tax. As mentioned above, to do this requires detailed information about each property, including market value, zoning bonus documents, as well as information on many other attributes including rental rate.

Although the incentive zoning is a governmental measure to encourage the construction of privately owned public space, the tax policy seems to have a counter effect on that. The added value in rent is obviously attractive to the property owner, while the increase in

property tax is not. From the policy maker's perspective, research in this direction could be enlightening, insofar as that it would provide more guidance regarding how to utilize tax policy to serve the well-being of the public sector better.

6. Impact of Incentive Zoning to the Street and the City

The result of this research has disclosed the added value of privately owned public space to the office rent and property price. However, it did not examine whether the privately owned public space generated out of the zoning resolution can, and if so to what extent, add value to the streets of the city. Of course, the value of a street is far more difficult to measure than that of an individual property. Rent or market value of each property on that street should be obtained before any further empirical analysis could be launched. It deserves some effort and would be a very interesting exploration.

Further more, a serial question could be whether the city itself has become a better place because of the trade off between the incentive zoning and the proliferation of the privately owned public space. Do the advantages of these public spaces, such as the identity, amenity, and positive image brought about to the city, outweigh the disadvantages and sacrifices in increased congestion, reduced light and air, as well as higher density? It would be the subject of a major and valuable study.

Although most part of this thesis has been dedicated to this topic, there are still areas that have not been fully scrutinized. This topic could be examined from both the qualitative and the quantitative sides as well. It could also be compared with the owners adjusted benefit from the incentive zoning, which is the added value in rent adjusted by the cost of maintenance (for the public space) and the increase in property tax. Studies on these aspects can help to better understand the role and mechanism of market in building urban environment.

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Appendix 1: Properties in Kayden's book

Part I

Kayden's office In Bill's Data

Kayden #	Kayden Name	Other Name	Kayden Grade	Block	Lot	Lot (ft) Frontage	Lot (ft) Depth
1	17 State ST		1	9	14	227	176
2	1 Battery Park Plz		5	9	29	133	284
11	77 Water St		2	33	1	214	122
12	32 Old Slip	Financial Sq	3	35	1	216	203
14	95 WALL ST		3	33	11	55	231
15	75 Wall St	Barclays Bank	2	31	11	280	117
16	110 Wall St		4	37	8	118	157
17	100 Wall St		4	38	1	117	194
24	100 William St		4	68	36	121	163
25	59 Maiden Ln		2	67	1	286	261
28	55 Broad St		4	25	1	130	183
29	40 Broad St		3	24	32	81	150
33	45 Broadway	45 Broadway Atrium	5	20	9	80	194
35	90 Washington St		5	17	29	156	179
36	40 Rector St		5	55	2	176	177
38	1 Liberty Plz	One Liberty Plz	2	62	1	226	315
39	140 Broadway	HSBC	4	48	1	143	317
45	375 Hudson St	Saatchi & Saatchi	5	599	64	199	347
54	555 West 57th St	BMW	3	1086	1	200	325
60	41 Madison Av	New York Merchandise Mart	5	855	37	98	225
64	475 Park Ave South		5	887	95	162	161
65	1250 Broadway		4	833	11	211	189
67	1 Pennsylvania Plz	One Penn Plz	2	783	70	648	198
71	1411 Broadway	World Apparel Center	3	815	1	205	197
73	489 Fifth Ave		5	1276	4	51	100
75	101 Park Ave		3	1295	1	197	280
76	6 East 43rd St	Emigrant Savings Bank	5	1277	8	82	200
77	1114 Sixth Ave	Grace	3	1258	9	234	200
78	1133 Sixth Ave		4	996	29	200	243
79	1155 Sixth Ave		3	997	29	200	210
85	1185 Sixth Ave	Westpoint Stevens Tower	3	999	29	200	225
92	280 Park Ave W		5	1284	26	159	200
93	437 Madison Ave		3	1285	21	200	193
94	12 East 49th St	Tower 49	3	1284	7	124	201
96	1251 Sixth Ave	1251 Ave of the Americas	2	1002	7501	NA	NA
97	1221 Sixth Ave	McGraw-Hill	3	1001	29	200	526
100	1633 Broadway	Paramount Plz	3	1022	43	201	450
101	1285 Sixth Ave	Painewebber	3	1004	29	200	400
102	650 Fifth Ave		3	1267	41	97	149
109	10 East 53rd St	Harpercollins	4	1288	7	70	200
110	520 Madison Ave		2	1289	14	200	212
112	51 West 52nd St	CBS	3	1268	1	200	255
113	1330 Sixth Ave		5	1269	1	200	117
114	1301 Sixth Ave		4	1005	29	200	375
118	810 Seventh Ave		3	1024	38	126	195
119	1700 Broadway		4	1025	25	201	201
122	156 West 56th St	Cityspire	4	1008	7503	225	200
123	1345 Sixth Ave	Alliance Capital	2	1007	29	200	500
124	1350 Sixth Ave	Men's Apparel	5	1270	71	100	223

125	1370 Sixth Ave	1370 Ave of the Americas	3	1271	71	100	122
126	712 Fifth Ave		3	1271	38	28	150
129	65 East 55th St	Park Ave Tower	3	1291	28	127	200
130	450 Park Ave		3	1292	37	133	100
132	725 Fifth Ave	Trump Tower	1	1292	7501	115	125
133	40 West 57th St		4	1272	63	200	200
136	899 Seventh Ave	Carnegie Hall Tower	4	1009	5	50	200
143	767 Fifth Ave	General Motors Building at Trump International Plz	U	1294	1	200	420
148	499 Park Ave		3	1313	4	125	90
175	600 Third Ave		3	895	45	197	158
176	622 Third Ave	Grand Central Plaza	U	1295	33	74	250
182	140 East 45th St	Two Grand Central Tower	3	1299	27	75	200
183	685 Third Ave		2	1317	1	201	155
192	747 Third Ave		3	1320	46	200	115
193	885 Second Ave	1 Dag Hammarskhold Plaza	3	1321	22	200	294
197	767 Third Ave		2	1321	47	89	153
198	777 Third Ave		3	1322	1	200	145
199	780 Third Ave		3	1303	33	200	120
204	825 Third Ave		5	1324	1	120	185
206	153 East 53rd St	Citigroup Center	1	1308	7501	200	325
215	909 Third Ave		5	1328	1	200	410
216	900 Third Ave		4	1309	32	120	151
217	919 Third Ave		5	1329	1	200	360
220	950 Third Ave		5	1311	40	75	145
221	150 East 58th St	Architects and Desiners	5	1312	41	240	100

Kayden's office not in Bill's Data

Kayden #	Kayden Name	Other Name	Kayden Grade	Block	Lot	Lot (ft) Frontage	Lot (ft) Depth
3	1 STATE ST	1 State St Plz	5	9	1	211	162
4	1 New York Plz		5	4	7501	NA	NA
5	125 Broad ST		3	5	7501	NA	NA
6	115 Borad ST	4 New York Plaza	5	5	10	167	297
7	85 Borad ST	Goldman Sachs	2	29	1	113	246
8	7 Hanover Sq		4	30	19	146	247
9	55 Water St		3	32	1	NA	NA
10	86 Water St	10 Hanover Sq	5	31	1	138	189
13	111 Wall St		3	35	10	216	234
18	88 Pine St	Wall St Plz	2	38	17	251	114
19	180 Maiden LN		1	37	23	231	212
20	175 Water St		4	71	1001	NA	NA
21	180 Water St		5	70	32	173	127
23	160 Water St		5	70	43	112	170
27	60 Wall St	J.P.Morgan	1	40	3	262	195
30	52 Broadway		4	22	28	124	158
31	1 Wall St	Bank of New York	4	23	7	362	102
32	55 Broadway	1 Exchange Plz	4	20	16	79	201
34	17 Battery Place		3	15	1	NA	NA
37	130 Liberty St	One Bankers Trust Plz	3	54	1	213	360
40	33 Maiden Ln	Two Federal Reserve Plz	3	67	23	178	128
42	101 Barclay St		5	128	2	289	344
44	388 Greenwich St	Salomon Smith Barney	2	186	1	240	175
50	825 Eighth Ave	One Worldwide Plz	1	1040	29	200	290
72	1095 Sixth Ave	Bell Atlantic	2	994	33	197	300
74	120 Park Ave	Philip Morris	1	1276	33	197	105
81	1515 Broadway	One Astor Place	4	1016	36	200	327
84	114 West 47th St	United State Trust	4	999	19	125	200

86	1211 Sixth Ave	1211 Ave of the Americans	3	1000	29	200	440
88	575 Fifth Ave		2	1282	65	100	200
89	383 Madison Ave	Bear Stearns	U	1282	21	200	215
90	245 Park Ave		5	1301	1	200	405
91	299 Park Ave		3	1303	1	200	200
95	611 Fifth Ave	Saks Tower	3	1285	7501	NA	NA
98	745 Seventh Ave		U	1002	1	100	104
105	40 East 52nd St		3	1287	28	87	201
106	345 Park Ave		3	1306	1	200	405
107	560 Lexington Ave		4	1305	13	89	180
108	55 East 52nd St	Park Ave Plz	1	1288	27	55	100
111	31 West 52nd St	Deutsche Bank	2	1268	7501	0	0
116	1325 Sixth Ave	1325 Ave of the Americas	4	1006	13	281	200
127	550 Madison Ave	SONY	1	1291	10	189	201
131	590 Madison Ave		1	1292	15	200	195
137	888 Seventh Ave		2	1028	29	100	200
142	9 West 57th St	Solow	3	1273	22	268	200
144	500 Park Ave	500 Park Tower	4	1294	37	100	125
146	135 East 57th St		2	1312	15	215	201
147	110 East 59th St		5	1313	5	191	200
180	201 East 42nd St		5	1316	1	180	105
181	425 Lexington Ave		2	1298	23	200	195
185	3 United Nations Plaza	Unicef House	2	1336	31	225	100
195	871 United Nations Plaza		2	1341	28	50	100
196	309 East 48th St	Libya House	5	1341	6	100	100
201	800 Third Ave		4	1304	33	200	140
202	805 Third Ave	Crystal Pavilion	2	1323	47	150	115
205	599 Lexington Ave		4	1307	23	200	225
208	885 Third Ave		4	1326	1	120	180
245	750 Lexingto Ave	International Plaza	4	1394	13	200	120

Residential in Kayden's Book

Kayden #	Kayden Name	Other Name	Kayden Grade	Block	Lot	Lot (ft) Frontage	Lot (ft) Depth
22	200 Water St		3	75	1	100	270
43	105 Duane St	Tribeca Tower	2	151	1	100	175
46	300 Mercer St		3	548	70	200	200
47	60 East 8th St	Georgetown Plz	5	548	7501	0	0
48	99 Jane St		2	642	14	NA	NA
49	650 West 42nd St	River Place	U	1089	1	585	197
51	330 West 56th St		5	1046	47	170	100
52	322 West 57th St	Sheffield	U	1047	18	175	200
53	347 West 57th St	Colonnade	5	1048	7501	82	205
56	108 Fifth Ave		3	817	7501	73	80
57	5 East 22nd St	Madison Green	2	851	7501	0	0
58	50 Lexington Ave		3	880	19	148	100
59	45 East 25th St	Stanford	5	855	7501	100	99
62	10 East 29th St	Madison Belvedere	U	858	8	114	197
63	407 Park Ave Soutn	Ascot	5	884	1	92	103
69	420 Fifth Ave	2	NA	839	7501	197	145
70	445 Fifth Ave	Fifth Ave Tower	2	869	7501	0	0
83	1548 Broadway	Bertelsmann	4	998	7501	180	186
87	1166 Sixth Ave		2	1261	7501	201	310
99	235 West 48th St	RITZ	U	1020	5	240	100
103	645 Fifth Ave	Olympic Tower	3	1287	7501	201	193
117	825 Seventh Ave	Tower 53	5	1006	7501	101	119
120	230 West 55th St	La Premiere	5	1026	49	146	100

128	535 Madison Ave	Warburg Dillon Read	2	1290	1001	NA	NA
135	146 West 57th St	Meropolitan Tower	3	1009	7501	85	100
138	211 West 56th St	Carnegie Mews	5	1028	17	80	171
139	1755 Broadway	Symphony House	3	1028	7501	105	320
140	58 West 58 St		5	1273	7501	100	100
145	115 East 57th St	Calleria	3	1312	7501	0	0
149	201 East 17th St	Park Towers Medical Plz	5	898	1	184	105
151	200 East 24th St	Crystal House	5	904	50	123	97
152	240 East 27th St	Parc East Tower Apartments	2	907	25	197	125
153	155 East 29th St	Biltmore Plz	5	885	42	148	120
154	155 East 31st St	Windsor Court	3	887	30	197	420
155	200 East 32nd St	Future	2	912	7502	0	0
156	200 East 33rd St	Laurence Tower	5	913	1	197	86
157	300 East 34 St		5	939	1	197	207
158	166 East 34th St		5	889	39	197	60
159	150 East 34th St	Dumont Plz	2	889	55	94	137
161	115 East 34th St	Murray Hill	5	890	11	133	98
162	132 East 35th St	Murray Hill House	5	890	20	66	197
163	401 East 34th Street	Rivergate	2	966	1	197	363
164	630 First Ave	Manhattan Place	2	968	7501	197	231
165	137 East 36th St	Carlton Regency	5	892	25	98	100
166	285 Lexington Ave	Carlton Regency North	5	892	62	47	100
167	560 Third Ave	Murray Hill Mews	2	893	41	197	134
169	311 East 38th St	Whitney	3	944	7501	73	123
170	330 East 39th St	New York Tower	5	944	10	225	197
171	330 East 38th St	Corinthian	2	943	7501	411	197
172	728 Second Ave	Churchill	5	945	7501	0	0
173	250 East 40th St	Highpoint	2	920	7501	0	0
177	235 East 40th St	Vanderbilt	2	1314	7501	0	0
178	245 East 40th St	Marlborough	5	1314	21	159	155
184	303 East 43rd St		3	1336	750	100	100
186	333 East 45th St	Lausanne	5	1338	7502	103	101
187	320 East 46th St	Belmont	3	1338	40	125	200
188	301 East 45th St	Delegate	5	1338	7501	75	100
189	866 Second ave	Dag Hammarskjold Plaza	5	1339	1001	NA	NA
190	240 East 47th St	Dag Hammarskhold Tower	2	1320	7501	0	0
191	212 East 47th St	L'ecole	5	1320	7	120	200
194	845 First Ave	Trump World Tower	U	1340	23	147	201
195	100 United Nations Plaza		2	1341	7503	272	100
200	141 East 48th St	Cosmopolitan	5	1303	7501	0	0
203	255 East 49th St	Sterling Plaza	2	1323	7501	156	80
209	300 East 54th St	Connaught Tower	2	1346	49	140	200
210	400 East 54 St	Revere	5	1365	7502	0	0
211	420 East 54th St	River Tower	2	1365	9	175	200
212	429 East 52nd St	Rivercourt	3	1364	34	60	200
213	415 East 54th St	St. James Tower	2	1366	7501	125	201
214	245 East 54th St	Brevard	2	1328	21	200	125
218	400 East 56th St	Plaza 400	5	1367	1	200	232
219	360 East 57th St	Morrison	3	1349	28	86	75
222	300 East 59th St	Landmark	3	1351	1	200	125
223	410 East 58th St	New Yorker East	5	1369	42	59	201
224	425 East 58th St	Sovereign	3	1370	15	386	200
225	418 East 59th St	Grand Sutton	3	1370	38	87	100
226	200 West 60th St	Concerto	2	1151	7501	200	160
227	45 West 60th St	Regent	2	1113	1	210	175
228	30 West 61st St	Beaumont	3	1113	7501	161	101
229	One Central Park West	Trump International Hotel and Tower	3	1113	7502	NA	NA
230	44 West 62nd St	Lincoln Plaza Towers	5	1114	61	100	160
231	61 West 62nd St	One Harkness Plaza/Harmony Atrium	3	1115	1	155	100

232	1886 Broadway	30 Lincoln Plaza	2	1115	17	234	234
233	1 Lincoln Plaza	One Lincoln Plaza	3	1116	7501	0	0
234	75 West End Ave	West End Towers	2	1171	63	708	373
235	2 Lincoln Square	Two Lincoln Square	1	1118	1	200	150
236	10 West 66th St		5	1118	22	155	200
237	80 Central Park West		5	1121	29	75	174
238	130 West 67th St	Toulaine	5	1138	53	152	100
239	145 West 67th St	Tower 67	3	1139	1	200	150
240	1991 Boradway	Bel Canto	2	1139	7501	0	0
241	2025 Broadway	Nevada Towers	5	1141	7502	0	0
242	201 West 70th St	One Sherman Square	5	1162	29	200	175
243	200 West 79th St	Gloucester	5	1170	7501	0	0
244	188 Est 60th St	Plaza Tower	5	1394	7	100	200
246	200 East 61st St	Savoy	2	1415	7501	200	104
247	303 East 60th St	Evansview	3	1435	7501	0	0
248	401 East 60th St	Bridge Tower Place	U	1455	1	75	100
249	300 East 62nd St	Paladin	3	1436	7501	90	75
250	200 East 62nd St	Wellingto Estates	5	1416	2	176	123
251	167 East 61st St	Trump Plaza	3	1396	33	200	110
252	188 East 64th St	Royale	3	1398	7501	0	0
253	200 East 64th St	Carlton Towers	3	1418	45	100	130
254	200 East 65th St	Bristol	3	1419	7502	0	0
255	160 East 65th St	Phoenix	5	1399	33	200	100
256	200 East 65th St	Concorde	5	1419	7503	0	0
257	304 East 65th St	RIO	3	1439	7501	80	100
258	265 East 66th St		5	1421	21	200	300
259	254 East 68th St		5	1422	21	200	125
260	200 East 69th St	Trump Palace	2	1423	7501	0	0
261	733 Park Ave		5	1405	72	100	70
262	211 East 70th St		2	1425	5	230	200
263	400 East 71st St	Windsor	5	1465	1	200	113
264	400 East 70th St	Kingsley	3	1464	7501	0	0
265	524 East 72nd St	Belaire	2	1483	7501	125	204
266	422 East 72nd St	Oxford	3	1466	7501	0	0
268	300 East 72nd St		5	1448	3	153	200
269	353 East 72nd St	Fontaine	5	1447	19	84	102
270	1365 York Ave	Somerset	5	1467	21	300	204
271	525 East 72nd St	One East River Place	2	1484	26	120	209
272	1385 York Ave	Stratford	5	1468	21	204	150
273	330 East 75th St	Saratoga	5	1449	7501	0	0
274	300 East 75th St	Fairmont	3	1449	3	162	200
275	515 East 79th St	Austen House	3	1576	14	185	102
276	301 East 79th St	Continental Towers	5	1542	7501	76	278
277	178 East 80th St	Kenilworth	5	1508	38	66	90
278	900 Park Ave	Park 900	5	1491	7501	0	0
279	980 Fifth Ave		5	1491	1	76	150
280	985 Fifth Ave		5	1491	4	76	115
281	345 East 80th St	East Winds	5	1543	7501	0	0
282	401 East 80th St		2	1560	1	204	106
283	1520 York Ave	Caldwell	5	1577	1	179	148
284	60 East End Ave		5	1579	23	102	188
285	200 East 82nd St	Wimbledon	3	1527	45	102	111
286	303 East 83rd St	Camargue	5	1546	1	204	125
287	353 East 83rd St		5	1546	23	177	100
288	400 East 84th St	Strathmore	3	1563	4	127	100
289	401 East 84th St	Dunhill	5	1564	7502	0	0
290	351 East 84th St	Adams Tower	5	1547	23	204	75
291	300 East 85th St	America	2	1547	49	102	116
292	171 East 84th St	Evans Tower	2	1513	7501	0	0

293	111 East 85th St		5	1514	8	56	204
294	444 East 86th St		5	1565	29	143	152
295	455 East 86th St	Channel Club	2	1566	7501	48	80
296	301 East 87th St	Corniche	5	1550	1	100	100
297	250 East 87th St	Newbury	5	1532	22	201	125
298	201 East 87th St	Claridge House	3	1533	1	195	201
301	50 East 89th St	Park Regis	3	1500	45	140	201
300	1065 Park Ave	Carlton Park	5	1516	1	75	80
302	200 East 89th St	Monarch	3	1534	7501	110	202
303	1675 York Ave	Andover	5	1568	21	201	157
304	1725 York Ave	East River Towers	5	1569	16	201	244
305	200 East 90th St		5	1535	3	158	110
306	45 East 89th St		5	1501	7501	0	0
307	40 East 94th St	Carnegie Hill Tower	3	1505	7502	145	160
308	300 East 93rd St	Waterford	2	1555	7501	100	101
309	340 93rd St	Plymouth Tower	3	1555	23	201	100
310	345 East 93rd St	Mill Rock Plaza	5	1556	23	201	125
311	301 East 94th St	Marmara Manhattan	3	1557	7502	75	100
312	182 East 95th St	Highgate	5	1523	34	175	100
313	205 East 95th St	Normandie Court	5	1541	1	25	100
314	235 East 95th St	Normandie Court	3	1541	21	25	75
315	1850 Second Ave		5	1558	50	50	100
316	175 East 96th St	Monterey	2	1624	33	300	201

Other Property Type in Kayden's Book

Kayden #	Kayden Name	Other Name	Kayden Grade	Block	Lot	Lot (ft) Frontage	Lot (ft) Depth
HOTELS							
26	72 William St	William St Hotel & Tower	U	42	22	136	136
41	55 Church St	Millenium Hilton Hotel	3	80	4	71	156
61	230 West 27th St		3	776	55	133	98
80	145 West 44th St	Millenium Broadway	4	997	10	117	200
82	1535 Broadway	Marriott Marquis	3	1017	29	207	433
104	457 Madison Ave	New York Place Hotel	3	1286	21	200	200
115	135 West 52nd St	Flatotel	4	1005	13	125	200
121	151 West 54th St	Rihga Royal Hotel	4	1007	5	200	100
134	118 West 57th St	Le Parker Meridien Hotel	3	1009	19	200	100
141	36 Central Park South	Park Lane Hotel	5	1274	11	127	200
174	222 East 39th St	Eastgate Tower	3	919	42	120	98
179	212 East 42nd St	New York Helmsley Hotel	3	1315	44	150	197
HOSPITALS & HEALTH FACILITIES							
55	1000 Tenth Ave	St. Luke's-Roosevelt Hospital Center	2	1068	1	200	502
150	353 East 17th St	Gilman Hall	5	923	31	92	144
UTILITY BUREAU PROPERTIES							
66	2 Pennsylvania Plz	Two Penn Plz/Madison Sq Garden	4	781	1	455	542
168	240 East 38th St		3	918	21	150	197
EDUCATIONAL FACILITIES							
68	3 Park Ave	Three Park Ave	3	889	1	237	198
267	220 East 72nd St		5	1426	35	142	102
299	115 East 87th St	Carnegie Towers	5	1516	7	153	201
RELIGIOUS FACILITIES							
160	243 Lexington Ave		U	890	25	21	80

Part II

Kayden's office In Bill's Data

Kayden #	Assessor Area est. (sq. ft)	Address	ZIP	Number of Buildings	Zoning Code	Land-use Description
1	23080	9-19 STATE ST	10004	1	C5-5	OFFICE BUILDINGS
2	39985	22-32 WHITEHALL ST	10004	1	C5-5	OFFICE BUILDINGS
11	25779	77-93 WATER STREET	10005	1	C6-9	OFFICE BUILDINGS
12	42176	77-93 FRONT ST	10005	1	C6-9	OFFICE BUILDINGS
14	22957	95 WALL ST	10005	1	C6-9	OFFICE BUILDINGS
15	30780	85 WALL ST	10005	1	C5-5	OFFICE BUILDINGS
16	17017	106-12 WALL ST	10005	1	C6-9	OFFICE BUILDINGS
17	22399	100 WALL ST	10005	1	C5-3	OFFICE BUILDINGS
24	18513	98-6 WILLIAM ST	10038	1	C5-5	OFFICE BUILDINGS
25	59391	68 JOHN ST	10038	3	C5-5	OFFICE BUILDINGS
28	23132	55-59 BROAD ST	10004	1	C5-5	OFFICE BUILDINGS
29	15984	38-44 BROAD ST	10004	2	C5-5	OFFICE BUILDINGS
33	15529	41-45 BROADWAY	10006	1	C5-5	OFFICE BUILDINGS
35	23902	82-92 WASHINGTON ST	10006	1	C6-9	OFFICE BUILDINGS
36	30080	5 WASHINGTON ST	10004	3	C6-9	OFFICE BUILDINGS
38	101217	135-71 BROADWAY	10006	1	C5-5	OFFICE BUILDINGS
39	52636	140 BROADWAY	10005	1	C5-5	OFFICE BUILDINGS
45	69096	363-85 HUDSON ST	10014	1	M1-6	OFFICE BUILDINGS
54	62769	555 WEST 57 ST	10019	1	M1-6	OFFICE BUILDINGS
60	22218	35-41 MADISON AVE	10010	1	C5-3	OFFICE BUILDINGS
64	21558	471-77 PARK AVE SOUTH	10016	1	C4-5A	OFFICE BUILDINGS
65	30750	1240-54 BROADWAY	10001	1	C6-6	OFFICE BUILDINGS
67	127966	206-68 WEST 34 ST	10001	4	C6-4	OFFICE BUILDINGS
71	50775	1411-29 BROADWAY	10018	1	C5-3	OFFICE BUILDINGS
73	7947	487-89 5 AVE	10017	1	C5-3	OFFICE BUILDINGS
75	52831	101 PARK AVENUE	10017	1	C5-2.5	OFFICE BUILDINGS
76	17975	5-9 EAST 42 STREET	10017	1	C5-2.5	OFFICE BUILDINGS
77	67875	1114 6 AVE	10036	1	C6-4.5	OFFICE BUILDINGS
78	42050	1133 6 AVE	10036	1	C6-6	OFFICE BUILDINGS
79	33639	1141-55 6 AVENUE	10036	1	C6-6	OFFICE BUILDINGS
85	42049	1185 6 AVENUE	10036	1	C6-6	OFFICE BUILDINGS
92	35200	33-39 EAST 48 ST	10017	1	C5-2.5	OFFICE BUILDINGS
93	38350	437 MADISON AVE	10022	1	C5-3	OFFICE BUILDINGS
94	25025	7 EAST 48 ST	10017	1	C5-2.5	OFFICE BUILDINGS
96	NA	1251 6 AVENUE	10020	NA	NZS	CONDOMINIUMS
97	102950	1221 6 AVENUE	10020	1	C6-5.5	OFFICE BUILDINGS
100	90400	1631-49 BROADWAY	10019	1	C6-7	OFFICE BUILDINGS
101	80333	1281-97 6 AVE	10019	1	C6-6.5	OFFICE BUILDINGS
102	13625	642-50 5 AVE	10019	1	C5-3	OFFICE BUILDINGS
109	17071	5-9 EAST 52 ST	10022	1	C5-2.5	OFFICE BUILDINGS
110	43532	512-20 MADISON AVE	10022	1	C5-3	OFFICE BUILDINGS
112	47725	60 WEST 53 ST	10019	1	C5-3	OFFICE BUILDINGS
113	21600	1320-36 6 AVE	10019	1	C6-6	OFFICE BUILDINGS
114	74631	1301-15 6 AVE	10019	1	C5-3	OFFICE BUILDINGS
118	26525	1680-88 BROADWAY	10019	1	C6-7	OFFICE BUILDINGS
119	30150	1690 BROADWAY	10019	1	C6-7	OFFICE BUILDINGS
122	24237	150-56 WEST 56 STREET	10019	1	X	CONDOMINIUMS
123	90375	120 WEST 55 STREET	10019	1	C6-6.5	OFFICE BUILDINGS
124	27375	1350-58 6 AVENUE	10019	1	C6-6	OFFICE BUILDINGS
125	14060	1368-74 6 AVENUE	10019	1	C6-6	OFFICE BUILDINGS
126	17555	712 5 AVENUE	10019	1	C5-3	OFFICE BUILDINGS
129	26398	75 EAST 55 STREET	10022	1	C5-2.5	OFFICE BUILDINGS

130	13375	444-50 PARK AVENUE	10022	1	C5-3	OFFICE BUILDINGS
132	19450	721-25 5 AVENUE	10022	1	X	CONDOMINIUMS
133	40166	38-46 WEST 57 STREET	10019	1	C5-3	OFFICE BUILDINGS
136	12556	152 WEST 57 STREET	10019	1	C6-6	OFFICE BUILDINGS
143	84350	761 5 AVENUE	10022	1	C5-3	OFFICE BUILDINGS
148	11287	499 PARK AVENUE	10022	1	C5-3	OFFICE BUILDINGS
175	24673	600-18 3 AVENUE	10016	1	C5-3	OFFICE BUILDINGS
176	46148	622 3 AVENUE	10017	1	C5-2.5	OFFICE BUILDINGS
182	17575	147-51 EAST 44 STREET	10017	1	C5-2.5	OFFICE BUILDINGS
183	31129	681-85 3 AVENUE	10017	2	C5-3	OFFICE BUILDINGS
192	21087	755 3 AVENUE	10017	1	C5-3	OFFICE BUILDINGS
193	40820	250 EAST 48 STREET	10017	1	C1-9	OFFICE BUILDINGS
197	14018	767 3 AVENUE	10017	1	C6-6	OFFICE BUILDINGS
198	26900	777-93 3 AVENUE	10017	1	C6-6	OFFICE BUILDINGS
199	22083	776 3 AVENUE	10017	1	C6-6	OFFICE BUILDINGS
204	29775	815-25 3 AVENUE	10022	4	C6-6	OFFICE BUILDINGS
206	70572	617-35 LEX. AVE/884-92 3 AVE	10022	1	C6-6	CONDOMINIUMS
215	82341	909 3 AVENUE	10022	1	C1-9	OFFICE BUILDINGS
216	16905	161-63 EAST 54 STREET	10022	1	C6-6	OFFICE BUILDINGS
217	64768	915-33 3 AVENUE	10022	1	C6-6	OFFICE BUILDINGS
220	12185	950 3 AVENUE	10022	1	C5-2	OFFICE BUILDINGS
221	28490	962-64 3 AVENUE	10022	1	C5-2	OFFICE BUILDINGS

Kayden's office not in Bill's Data

Kayden #	Assessor Area est. (sq. ft)	Address	ZIP	Number of Buildings	Zoning Code	Land-use Description
3	29481	34-50 WHITEHALL ST	10004	1	C5-5	OFFICE BUILDINGS
4	NA	1 WATER ST	10004	1	C5-5	CONDOMINIUMS
5	NA	125 BROAD ST	10004	0	C5-5	CONDOMINIUMS
6	54023	115 BROAD ST	10004	1	C5-5	OFFICE BUILDINGS
7	25778	91-97 BROAD ST	10004	1	C5-5	OFFICE BUILDINGS
8	35496	7-15 HANOVER SQ	10004	1	C5-5	OFFICE BUILDINGS
9	NA	NA	NA	NA	NA	NA
10	24400	4-10 HANOVER SQ	10005	1	C5-5	OFFICE BUILDINGS
13	48741	107-13 WALL ST	10005	1	C6-9	OFFICE BUILDINGS
18	27600	88 PINE ST	10005	1	C5-3	OFFICE BUILDINGS
19	46799	180 MAIDEN LN	10005	1	C5-3	OFFICE BUILDINGS
20	NA	NA	NA	NA	NA	NA
21	23555	180 WATER ST	10038	1	C5-5	OFFICE BUILDINGS
23	24092	160-70 WATER ST	10038	1	C5-5	OFFICE BUILDINGS
27	53632	60 WALL ST	10005	1	C5-5	OFFICE BUILDINGS
30	18640	52-56 BROADWAY	10004	1	C5-5	OFFICE BUILDINGS
31	42178	58-80 BROADWAY	10004	2	C5-5	OFFICE BUILDINGS
32	15722	51-55 BROADWAY	10006	1	C5-5	OFFICE BUILDINGS
34	NA	NA	NA	NA	NA	NA
37	66222	5 ALBANY ST	10006	1	C6-9	OFFICE BUILDINGS
40	23382	56-70 NASSAU ST	10038	1	C5-5	OFFICE BUILDINGS
42	103043	123 BARCLAY ST	10007	1	C6-4	OFFICE BUILDINGS
44	82323	107 NORTH MOORE ST	10013	1	C6-4	OFFICE BUILDINGS
50	58240	815-29 8 AVE	10019	1	C6-2	OFFICE BUILDINGS
72	56781	1095 6 AVE	10036	2	C6-6	OFFICE BUILDINGS
74	20737	118-34 PARK AVE	10017	1	C5-3	OFFICE BUILDINGS
81	65765	1515 BROADWAY	10036	1	C6-7T	OFFICE BUILDINGS
84	25732	114 WEST 47 ST	10036	1	C6-5.5	OFFICE BUILDINGS
86	84852	1201-17 6 AVE	10036	1	C6-5.5	OFFICE BUILDINGS
88	20083	571-77 5 AVE	10017	1	C5-3	OFFICE BUILDINGS
89	43313	379-85 MADISON AVE	10017	1	C5-3	OFFICE BUILDINGS

90	81337	245 PARK AVE	10017	1	C5-3	OFFICE BUILDINGS
91	40166	299 PARK AVE	10017	1	C5-3	OFFICE BUILDINGS
95	NA	611 5 AVENUE	10022	NA	NZS	CONDOMINIUMS
98	62478	745-51 7 AVE	10019	1	NZS	OFFICE BUILDINGS
105	21843	41 EAST 51 ST	10022	1	C5-2.5	OFFICE BUILDINGS
106	81337	345 PARK AVENUE	10022	1	C5-2.5	OFFICE BUILDINGS
107	17350	560 LEXINGTON AVE	10022	1	C6-6	OFFICE BUILDINGS
108	38314	57-63 EAST 52 ST	10022	1	C5-2.5	OFFICE BUILDINGS
111	45870	44 WEST 53 ST	10019	1	C5-2.5	CONDOMINIUMS
116	35799	141 WEST 53 ST	10019	1	C6-6.5	OFFICE BUILDINGS
127	36803	550 MADISON AVENUE	10022	1	C5-3	OFFICE BUILDINGS
131	39164	580 MADISON AVENUE	10022	1	C5-3	OFFICE BUILDINGS
137	32425	888-92 7 AVENUE	10019	1	C6-6	OFFICE BUILDINGS
142	62058	9-25 WEST 57 STREET	10019	1	C5-2.5	OFFICE BUILDINGS
144	12500	500 PARK AVENUE	10022	1	C5-3	OFFICE BUILDINGS
146	26760	123 EAST 57 STREET	10022	1	C5-2	OFFICE BUILDINGS
147	26750	111-19 EAST 58 STREET	10022	1	C5-2.5	OFFICE BUILDINGS
180	16944	661-69 3 AVENUE	10017	1	C5-3	OFFICE BUILDINGS
181	35145	417 LEXINGTON AVENUE	10017	1	C5-3	OFFICE BUILDINGS
185	22590	338 EAST 44 STREET	10017	1	C5-2	OFFICE BUILDINGS
195	5000	871 1 AVENUE	10017	1	C5-2	OFFICE BUILDINGS
196	10042	309 EAST 48 STREET	10017	1	C1-9	OFFICE BUILDINGS
201	24100	800 3 AVENUE	10022	1	C6-6	OFFICE BUILDINGS
202	24975	801-13 3 AVENUE	10022	1	C6-6	OFFICE BUILDINGS
205	45022	599 LEXINGTON AVENUE	10022	1	C6-6	OFFICE BUILDINGS
208	33889	859 3 AVENUE	10022	1	C6-6	OFFICE BUILDINGS
245	24602	742 LEXINGTON AVENUE	10022	2	C5-2	OFFICE BUILDINGS

Residential in Kayden's Book

Kayden #	Assessor Area est. (sq. ft)	Address	ZIP	Number of Buildings	Zoning Code	Land-use Description
22	33294	127 JOHN ST	10038	1	C6-4	ELEV APARTMENTS
43	17946	101 DUANE ST	10007	1	C6-4A	ELEV APARTMENTS
46	37400	7-9 WAVERLY PLACE	10003	1	C6-4	ELEV APARTMENTS
47	0	60 EAST 8 STREET	10003	1	C6-4	CONDOMINIUMS
48	NA	NA	NA	NA	NA	NA
49	110080	640 WEST 42 ST	10036	1	C6-4	ELEV APARTMENTS
51	17137	330 WEST 56 STREET	10019	1	R8	ELEV APARTMENTS
52	39809	316-28 WEST 57 ST	10019	1	C6-4	ELEV APARTMENTS
53	12251	347 WEST 57 STREET	10019	1	C6-4	CONDOMINIUMS
56	5896	108 5 AVENUE	10011	1	C6-4M	CONDOMINIUMS
57	28028	5 EAST 22 STREET	10010	1	C6-4M	CONDOMINIUMS
58	11938	50 LEXINGTON AVENUE	10010	1	C5-2	ELEV APARTMENTS
59	9890	43-51 EAST 25 STREET	10010	1	C5-3	CONDOMINIUMS
62	21181	7-9 EAST 28 STREET	10016	1	C5-2	ELEV APARTMENTS
63	9535	407 PARK AVE SOUTH	10016	1	C6-4A	ELEV APARTMENTS
69	NA	408-20 5 AVE	10018	1	NZS	CONDOMINIUMS
70	13350	441-51 5 AVENUE	10016	1	X	CONDOMINIUMS
83	38686	1538-48 BROADWAY	10036	1	C6-7T	CONDOMINIUMS
87	60126	1166 6 AVENUE	10036	1	X	CONDOMINIUMS
99	24100	227-49 WEST 48 ST	10036	1	C6-5	ELEV APARTMENTS
103	25600	645-53 5 AVE	10022	1	C5-3	CONDOMINIUMS
117	21300	825 7 AVENUE	10019	1	X	CONDOMINIUMS
120	15940	230 WEST 55 STREET	10019	1	C6-6	ELEV APARTMENTS
128	NA	NA	NA	NA	NA	NA
135	18585	146 WEST 57 STREET	10019	1	X	CONDOMINIUMS
138	16120	1752 BROADWAY	10019	1	C6-6	ELEV APARTMENTS

139	34221	235 WEST 56 STREET	10019	1	C5-3	CONDOMINIUMS
140	17025	58 WEST 58 STREET	10019	1	C5-1	CONDOMINIUMS
145	17272	117 EAST 57 STREET	10022	1	C5-3	CONDOMINIUMS
149	19182	195 3 AVENUE	10003	1	C1-9A	ELEV APARTMENTS
151	12050	309-19 3 AVENUE	10010	1	C2-8A	ELEV APARTMENTS
152	24687	463-79 2 AVENUE	10016	1	C1-8A	ELEV APARTMENTS
153	16540	416-26 3 AVENUE	10016	1	C2-8	ELEV APARTMENTS
154	82950	151 EAST 31 STREET	10016	2	R8B	ELEV APARTMENTS
155	0	200 EAST 32 STREET	10016	0	C1-9	CONDOMINIUMS
156	24237	471 3 AVENUE	10016	1	C1-9	ELEV APARTMENTS
157	30365	604-20 2 AVENUE	10016	1	C1-9	ELEV APARTMENTS
158	15553	488 3 AVENUE	10016	1	C1-9	ELEV APARTMENTS
159	10266	150 EAST 34 STREET	10016	1	C1-9	HOTELS
161	13133	115 EAST 34 STREET	10016	1	C1-9	ELEV APARTMENTS
162	15250	132 EAST 35 STREET	10016	1	C1-9	ELEV APARTMENTS
163	71692	606 1 AVENUE	10016	1	C1-9	ELEV APARTMENTS
164	45526	630 1 AVENUE	10016	1	C1-9	CONDOMINIUMS
165	9895	273-75 LEXINGTON AVENUE	10016	1	R10	ELEV APARTMENTS
166	5795	287 LEXINGTON AVENUE	10016	1	R10	ELEV APARTMENTS
167	25527	560-72 3 AVENUE	10016	1	C1-9	ELEV APARTMENTS
169	9391	311 EAST 38 STREET	10016	1	C1-9	CONDOMINIUMS
170	35591	330 EAST 39 STREET	10016	1	C1-9	ELEV APARTMENTS
171	27200	330 EAST 38 STREET	10016	1	C1-9	CONDOMINIUMS
172	0	300 EAST 40 STREET	10016	1	C1-9	CONDOMINIUMS
173	11924	250 EAST 40 STREET	10016	1	C1-9	CONDOMINIUMS
177	26712	235 EAST 40 STREET	10017	1	X	CONDOMINIUMS
178	22178	747 2 AVENUE	10017	1	C1-9	ELEV APARTMENTS
184	10050	806 2 AVENUE	10017	1	C5-2	CONDOMINIUMS
186	10318	325-33 EAST 45 STREET	10017	1	C5-2	CONDOMINIUMS
187	17575	314-24 EAST 46 STREET	10017	1	C5-2	ELEV APARTMENTS
188	7542	846-48 2 AVENUE	10017	1	C1-9	CONDOMINIUMS
189	NA	NA	NA	NA	NA	NA
190	20357	238-40 EAST 47 STREET	10017	1	C1-9	CONDOMINIUMS
191	17812	211 EAST 46 STREET	10017	1	C5-3	ELEV APARTMENTS
194	37050	345 EAST 47 STREET	10017	1	C5-2	ELEV APARTMENTS
195	25179	100 UNITED NATIONS PLAZA	10017	1	X	CONDOMINIUMS
200	13012	145 EAST 48 STREET	10017	1	C6-4.5	CONDOMINIUMS
203	11559	255 EAST 49 STREET	10017	1	C1-9	CONDOMINIUMS
209	24809	1016-20 2 AVENUE	10022	1	C1-9	ELEV APARTMENTS
210	0	400 EAST 54 STREET	10022	1	R10	CONDOMINIUMS
211	28308	415-23 EAST 53 STREET	10022	1	R10	ELEV APARTMENTS
212	20847	422 EAST 53 STREET	10022	2	R10	ELEV APARTMENTS
213	25104	415-23 EAST 54 STREET	10022	1	R10	CONDOMINIUMS
214	22594	1035-43 2 AVENUE	10022	1	C1-9	ELEV APARTMENTS
218	46759	1006 1 AVENUE	10022	1	R10	ELEV APARTMENTS
219	6463	1033 1 AVENUE	10022	1	R10	ELEV APARTMENTS
222	22593	1110-16 2 AVENUE	10022	1	C5-2	ELEV APARTMENTS
223	7637	410-12 EAST 58 STREET	10022	1	R10	ELEV APARTMENTS
224	62729	419-25 EAST 58 STREET	10022	1	R10	ELEV APARTMENTS
225	8737	418 EAST 59 STREET	10022	1	R10	ELEV APARTMENTS
226	32233	2 AMSTERDAM AVENUE	10023	1	C4-7	CONDOMINIUMS
227	26511	21 COLUMBUS AVENUE	10023	1	C4-7	ELEV APARTMENTS
228	16167	30 WEST 61 STREET	10023	1	C4-7	CONDOMINIUMS
229	NA	1 CENTRAL PARK WEST	10023	NA	C6-6	CONDOMINIUMS
230	16000	53 COLUMBUS AVENUE	10023	1	C4-7	ELEV APARTMENTS
231	18650	61 WEST 62 STREET	10023	1	C4-7	ELEV APARTMENTS
232	38150	1886-88 BROADWAY	10023	1	C4-7	ELEV APARTMENTS
233	59801	20 WEST 64 STREET	10023	1	C4-7	CONDOMINIUMS
234	176272	55-95 WEST END AVENUE	10023	1	C4-7	ELEV APARTMENTS

235	25117	121-23 COLUMBUS AVENUE		1	C4-7	RELIGIOUS FACILITIES
236	28125	5-13 WEST 65 STREET	10023	1	R10A	ELEV APARTMENTS
237	15073	80 CENTRAL PARK WEST	10023	1	R10A	ELEV APARTMENTS
238	15263	130-38 WEST 67 STREET	10023	1	C4-7	ELEV APARTMENTS
239	30125	145 WEST 67 STREET	10023	1	C4-7	ELEV APARTMENTS
240	5883	1991 BROADWAY	10023	1	C4-7	CONDOMINIUMS
241	17438	2021 BROADWAY	10023	1	C4-6A	CONDOMINIUMS
242	34300	2039-49 BROADWAY	10023	1	C4-6A	ELEV APARTMENTS
243	20433	380 AMSTERDAM AVENUE	10024	1	R10A	CONDOMINIUMS
244	24100	118 EAST 60 STREET	10022	1	C5-2.5	ELEV APARTMENTS
246	19983	200 EAST 61 STREET	10021	1	C1-9	CONDOMINIUMS
247	10042	303 EAST 60 STREET	10022	1	C2-8	CONDOMINIUMS
248	7541	1102 1 AVENUE	10021	1	C4-7	ELEV APARTMENTS
249	6750	1178 2 AVENUE	10021	1	C2-8	CONDOMINIUMS
250	20128	1033 3 AVENUE	10021	1	C1-9	ELEV APARTMENTS
251	21087	1030-48 3 AVENUE	10021	1	C1-9	ELEV APARTMENTS
252	20083	188 EAST 64 STREET	10021	1	C1-9	CONDOMINIUMS
253	13054	1081-89 3 AVENUE	10021	1	C1-9	ELEV APARTMENTS
254	46191	200-10 EAST 65 STREET	10021	1	C1-9	CONDOMINIUMS
255	20083	1090-98 3 AVENUE	10021	1	C1-9	ELEV APARTMENTS
256	0	220 EAST 65 STREET	10021	0	X	CONDOMINIUMS
257	9670	304 EAST 65 STREET	10021	1	C2-8	CONDOMINIUMS
258	40168	1261-81 2 AVENUE	10021	2	C1-9	ELEV APARTMENTS
259	24268	1283-97 2 AVENUE	10021	1	C1-9	ELEV APARTMENTS
260	0	200 E 69 ST/205 E 68 ST	10021	1	X	CONDOMINIUMS
261	7029	733 PARK AVENUE	10021	1	R10	ELEV APARTMENTS
262	43000	211-15 EAST 70 STREET	10021	1	R8B	ELEV APARTMENTS
263	34286	1306 1 AVENUE	10021	1	C2-8	ELEV APARTMENTS
264	13883	400 EAST 70 STREET	10021	1	C2-8	CONDOMINIUMS
265	25542	524 EAST 72 STREET	10021	1	R9	CONDOMINIUMS
266	0	422 EAST 72 STREET	10021	1	R8	CONDOMINIUMS
268	25542	1408 2 AVENUE	10021	1	C1-9	ELEV APARTMENTS
269	8582	353 EAST 72 STREET	10021	1	R10A	ELEV APARTMENTS
270	35757	1365-67 YORK AVENUE	10021	1	R10	ELEV APARTMENTS
271	28397	530-40 EAST 73 STREET	10021	1	R10	ELEV APARTMENTS
272	30650	1385 YORK AVENUE	10021	1	R10	ELEV APARTMENTS
273	20441	1439-43 1 AVENUE	10021	1	R8B	CONDOMINIUMS
274	35400	1424 2 AVENUE	10021	1	C1-9	ELEV APARTMENTS
275	18900	515 EAST 79 STREET	10021	1	R10A	ELEV APARTMENTS
276	28401	1522-32 2 AVENUE	10021	1	X	CONDOMINIUMS
277	10435	1402 3 AVENUE	10021	1	C1-9	ELEV APARTMENTS
278	13940	900 PARK AVENUE	10021	1	R10	CONDOMINIUMS
279	11506	980 5 AVENUE	10021	1	R10	ELEV APARTMENTS
280	10384	985-87 5 AVENUE	10021	1	R10	ELEV APARTMENTS
281	0	345 EAST 80 STREET	10021	1	C1-9	CONDOMINIUMS
282	21800	1540-52 1 AVENUE	10028	1	C1-9	ELEV APARTMENTS
283	22025	1520-28 YORK AVENUE	10028	1	R10	ELEV APARTMENTS
284	24374	60 EAST END AVENUE	10028	1	R10A	ELEV APARTMENTS
285	11340	200 EAST 82 STREET	10028	1	C1-9	ELEV APARTMENTS
286	17887	1602-12 2 AVENUE	10028	1	C1-9	ELEV APARTMENTS
287	18400	1601-13 1 AVENUE	10028	1	C1-9	ELEV APARTMENTS
288	14359	1608-16 1 AVENUE	10028	1	C1-9	ELEV APARTMENTS
289	6133	401 EAST 84 STREET	10028	1	C1-9	CONDOMINIUMS
290	19925	1617 1 AVENUE	10028	1	C1-9	ELEV APARTMENTS
291	11850	1632 2 AVENUE	10028	1	C1-9	ELEV APARTMENTS
292	17776	171 EAST 84 STREET	10028	1	X	CONDOMINIUMS
293	13690	111-15 EAST 85 STREET	10028	1	C5-1A	ELEV APARTMENTS
294	19325	436-44 EAST 86 STREET	10028	1	R10A	ELEV APARTMENTS
295	3840	455 EAST 86 STREET	10028	1	R10A	CONDOMINIUMS

296	10067	1682-90 2 AVENUE	10128	1	C2-8	ELEV APARTMENTS
297	25187	1659-79 2 AVENUE	10028	1	C2-8A	ELEV APARTMENTS
298	35722	201 EAST 87 STREET	10128	1	C1-9	ELEV APARTMENTS
301	23345	48-56 EAST 89 STREET	10128	1	R8B	ELEV APARTMENTS
300	6057	1065 PARK AVENUE	10128	1	R10	ELEV APARTMENTS
302	13191	200 EAST 89 STREET	10128	1	C1-9	CONDOMINIUMS
303	30616	1673-85 YORK AVENUE	10128	1	R10	ELEV APARTMENTS
304	34745	1725-29 YORK AVENUE	10128	1	R10	ELEV APARTMENTS
305	16578	1589 3 AVENUE	10128	1	C1-9	ELEV APARTMENTS
306	0	1239 MADISON AVENUE	10128	1	R10	CONDOMINIUMS
307	22102	40 EAST 94 STREET	10128	1	R10	CONDOMINIUMS
308	10100	1776 2 AVENUE	10128	1	C2-8	CONDOMINIUMS
309	25177	1781 1 AVENUE	10128	1	C2-8	ELEV APARTMENTS
310	25178	1809 1 AVENUE	10128	1	C2-8	ELEV APARTMENTS
311	0	301 EAST 94 STREET	10128	1	X	CONDOMINIUMS
312	17566	1680 3 AVENUE	10128	1	C2-8	ELEV APARTMENTS
313	25605	1695-9 3 AVENUE	10128	1	R10	ELEV APARTMENTS
314	92927	1849 2 AVENUE	10128	1	R10	ELEV APARTMENTS
315	5000	1852 2 AVENUE	10128	1	R10A	ELEV APARTMENTS
316	40873	175 EAST 96 STREET	10128	1	R10	ELEV APARTMENTS

Other Property Type in Kayden's Book

Kayden #	Assessor Area est. (sq. ft)	Address	ZIP	Number of Buildings	Zoning Code	Land-use Description
HOTELS						
26	18833	68-70 WILLIAM ST	10005	0	C5-5	VACANT LAND
41	18044	20 DEY ST	10007	1	C5-5	HOTELS
61	13183	230 WEST 27 ST	10001	1	C6-2	HOTELS
80	16820	153 WEST 44 ST	10036	1	C6-5.5	HOTELS
82	74287	1531-37 BROADWAY	10036	1	C6-7T	HOTELS
104	38350	451 MADISON AVE	10022	1	C5-3	HOTELS
115	16318	137 WEST 52 ST	10019	1	C6-6.5	HOTELS
121	22275	153-57 WEST 54 ST	10019	1	C6-6	HOTELS
134	22088	123 WEST 56 STREET	10019	1	C6-6	HOTELS
141	20275	34-38 CENTRAL PARK SOUTH	10019	1	C5-2.5	HOTELS
174	11932	224-32 EAST 39 STREET	10016	1	C1-9	HOTELS
179	29625	214 EAST 42 STREET	10017	1	C5-3	HOTELS
HOSPITALS & HEALTH FACILITIES						
55	100959	424 10 AVENUE	10001	1	C4-7	HEALTH FACILITIES
150	13248	301 1 AVENUE	10003	1	C1-8	HEALTH FACILITIES
UTILITY BUREAU PROPERTIES						
66	0	14 PENN PLAZA	10001	0	C6-2	UTILITY BUREAU
168	0	237 EAST 37 STREET	10016	1	C1-9	UTILITY BUREAU
EDUCATIONAL FACILITIES						
68	46748	111 EAST 33 ST	10016	1	C5-3	EDUCATIONAL
267	28772	232 EAST 72 STREET	10021	1	R10A	EDUCATIONAL
299	30884	113-23 EAST 87 STREET	10128	1	R10	EDUCATIONAL
RELIGIOUS FACILITIES						
160	9925	243 LEXINGTON AVENUE	10016	1	C1-9	RELIGIOUS

Part III

Kayden's office In Bill's Data

Kayden #	Detailed Description	Year Built	No. of Stories	Residential Units	Assessed Value	Market Value
1	Tower Types	1987	42	0	22212000	57400000
2	Tower Types	1971	35	0	62640000	159000000
11	Tower Types	1969	26	0	32121000	79500000
12	Tower Types	1987	36	0	65160000	169000000
14	Tower Types	1969	22	0	33480000	85100000
15	Tower Types	1987	36	0	40665008	98500000
16	Ten Stories and Over (Main Avenue Type)	1965	27	0	10350000	26000000
17	Tower Types	1969	29	0	23994000	63600000
24	Ten Stories and Over (Main Avenue Type)	1973	22	0	13626000	32800000
25	Ten Stories and Over (Main Avenue Type)	1965	44	0	67500000	133000000
28	Ten Stories and Over (Main Avenue Type)	1968	31	0	14438000	37200000
29	Ten Stories and Over (Main Avenue Type)	1982	24	0	12114000	31100000
33	Tower Types	1983	33	0	21528000	51000000
35	Tower Types	1969	27	0	9603000	21000000
36	Ten Stories and Over (Main Avenue Type)	1921	17	0	11943000	30600000
38	Tower Types	1973	54	0	145260000	368000000
39	Ten Stories and Over (Main Avenue Type)	1967	50	0	56520000	128000000
45	Miscellaneous	1987	18	0	58140000	164000000
54	Ten Stories and Over (Main Avenue Type)	1971	20	0	30303000	80000000
60	Miscellaneous	1971	43	0	22302000	55500000
64	Ten Stories and Over (Main Avenue Type)	1970	34	0	19596000	47000000
65	Ten Stories and Over (Side Street Type)	1969	39	0	34844000	77300000
67	Tower Types	1972	55	0	139770000	380000000
71	Ten Stories and Over (Side Street Type)	1969	42	0	86650000	217000000
73	Tower Types	1971	33	0	11466000	30000000
75	Tower Types	1982	46	0	109170000	280000000
76	Ten Stories and Over (Main Avenue Type)	1968	27	0	20826000	48500000
77	Tower Types	1971	47	0	97380000	245000000
78	Tower Types	1968	44	0	64710000	155000000
79	Ten Stories and Over (Main Avenue Type)	1984	40	0	65682000	159000000
85	Ten Stories and Over (Main Avenue Type)	1970	42	0	75150000	190000000
92	Tower Types	1968	41	0	77760002	210000000
93	Tower Types	1967	38	0	58759000	151000000
94	Tower Types	1984	45	0	69120000	171000000
96	Commercial	NA	54	0	189040019	455764998
97	Ten Stories and Over (Main Avenue Type)	1971	51	0	175680000	436000000
100	Tower Types	1972	48	0	118720000	293000000
101	Tower Types	1961	39	0	154339993	408000000
102	Ten Stories and Over (Main Avenue Type)	1977	36	0	32031000	82400000
109	Ten Stories and Over (Main Avenue Type)	1971	38	0	27999000	67000000
110	Tower Types	1982	43	0	91080000	224000000
112	Tower Types	1963	38	0	63260000	166000000
113	Tower Types	1965	39	0	42786000	111000000
114	Tower Types	1965	46	0	161959998	470000000
118	Tower Types	1969	41	0	42444000	118000000
119	Tower Types	1968	41	0	33120000	88700000
122	Mixed: See Condo File	1987	70	339	51223424	126150005
123	Tower Types	1968	49	0	171280000	442000000
124	Ten Stories and Over (Main Avenue Type)	1966	34	0	37476000	90700000
125	Ten Stories and Over (Main Avenue Type)	1971	34	0	24587000	61800000
126	Ten Stories and Over (Main Avenue Type)	1988	50	0	69930002	183000000
129	Tower Types	1986	38	0	73350000	200000000

130	Tower Types	1972	32	0	31464000	82700000
132	Mixed: See Condo File	1983	56	257	75184481	181999989
133	Ten Stories and Over (Main Avenue Type)	1972	36	0	42867000	99100000
136	Tower Types	1988	62	0	50940000	125000000
143	Tower Types	1968	50	0	216550000	535000000
148	Ten Stories and Over (Main Avenue Type)	1981	27	0	27612000	73100000
175	Tower Types	1970	40	0	38054000	92000000
176	Tower Types	1974	41	0	72061200	202000000
182	Tower Types	1982	43	0	58340000	140000000
183	Tower Types	1960	27	0	34681500	100000000
192	Tower Types	1971	39	0	24174000	62000000
193	Tower Types	1971	48	0	66960000	159000000
197	Tower Types	1980	40	0	21510000	52000000
198	Tower Types	1964	39	0	38340000	92200000
199	Tower Types	1983	50	0	44202000	115000000
204	Tower Types	1969	40	0	34461000	87000000
206	Commercial	1977	57	0	151595000	372700001
215	Tower Types	1967	32	0	61200000	156000000
216	Tower Types	1983	36	0	55260000	130000000
217	Tower Types	1970	46	0	110160000	260000000
220	Tower Types	1977	32	0	22050000	54200000
221	Tower Types	1968	39	0	38880000	98000000

Kayden's office not in Bill's Data

Kayden #	Detailed Description	Year Built	No. of Stories	Residential Units	Assessed Value	Market Value
3	Tower Types	1970	32	0	34888500	96600000
4	Commercial	NA	50	0	138102577	328500010
5	Commercial	NA	40	0	45053986	121000000
6	Tower Types	1969	22	0	44400000	110000000
7	Tower Types	1983	31	0	46930000	110000000
8	Tower Types	1983	26	0	59315000	126000000
9	NA	NA	NA	NA	NA	NA
10	Tower Types	1972	21	0	35289000	84800000
13	Tower Types	1968	24	0	44224000	109000000
18	Ten Stories and Over (Main Avenue Type)	1973	32	0	26082000	72400000
19	Tower Types	1982	41	0	54930000	131000000
20	NA	NA	NA	NA	NA	NA
21	Tower Types	1971	24	0	28968000	65000000
23	Tower Types	1972	24	0	16767000	45800000
27	Tower Types	1987	47	0	142290000	339000000
30	Tower Types	1982	20	0	24678000	59400000
31	Tower Types	1967	50	0	54406000	122000000
32	Ten Stories and Over (Main Avenue Type)	1983	31	0	12528000	29600000
34	NA	NA	NA	NA	NA	NA
37	Tower Types	1974	39	0	78672000	185000000
40	Ten Stories and Over (Main Avenue Type)	1986	27	0	36094000	86800000
42	Tower Types	1983	26	0	62040000	144000000
44	Tower Types	1989	39	0	87920000	202000000
50	Miscellaneous	1987	49	0	138000000	370000000
72	Ten Stories and Over (Main Avenue Type)	1972	41	0	67770000	165000000
74	Ten Stories and Over (Main Avenue Type)	1981	26	0	53460000	125000000
81	Tower Types	1970	53	0	96426000	264000000
84	Tower Types	1987	25	0	55890000	137000000
86	Tower Types	1973	45	0	140490000	376000000
88	Ten Stories and Over (Main Avenue Type)	1962	35	0	57960000	143000000
89	Ten Stories and Over (Main Avenue Type)	1999	45	0	149085000	340100000

90	Tower Types	1966	45	0	172800000	398000000
91	Tower Types	1966	42	0	70920000	170000000
95	Commercial	NA	38	0	73458000	171800000
98	Tower Types	1999	33	0	89275500	200000000
105	Tower Types	1986	24	0	43812000	108000000
106	Tower Types	1969	44	0	166680000	395000000
107	Tower Types	1980	22	0	28836000	68100000
108	Tower Types	1980	40	0	103140000	271000000
111	Commercial	1986	30	0	80713000	199700000
116	Ten Stories and Over (Side Street Type)	1988	35	0	68760000	192000000
127	Tower Types	1983	35	0	88300000	200000000
131	Ten Stories and Over (Main Avenue Type)	1981	43	0	90756000	231000000
137	Tower Types	1970	45	0	43719000	122000000
142	Tower Types	1971	49	0	129690000	324000000
144	Ten Stories and Over (Main Avenue Type)	1959	11	0	10521000	25500000
146	Ten Stories and Over (Main Avenue Type)	1987	32	0	45405002	105000000
147	Tower Types	1969	36	0	41247000	104000000
180	Ten Stories and Over (Main Avenue Type)	1966	31	0	20376000	47800000
181	Ten Stories and Over (Main Avenue Type)	1987	31	0	74160000	190000000
185	Ten Stories and Over (Side Street Type)	1987	15	32	18404000	42800000
195	Ten Stories and Over (Main Avenue Type)	1990	23	0	13230000	30000000
196	With Residential Apartments	1984	24	1	11673000	26900000
201	Tower Types	1970	41	0	46800000	118000000
202	Tower Types	1980	29	0	47430000	117000000
205	Tower Types	1985	47	0	113120000	283000000
208	Tower Types	1982	29	0	65880001	165000000
245	Ten Stories and Over (Main Avenue Type)	1986	28	0	35640002	93300000

Residential in Kayden's Book

Kayden #	Detailed Description	Year Built	No. of Stories	Residential Units	Assessed Value	Market Value
22	Luxury Types	1973	31	576	35946000	84400000
43	Fireproof with Stores	1988	52	440	24048000	62000000
46	Fireproof with Stores	1976	35	486	30232000	80000000
47	Mixed: See Condo File	0	31	389	20520630	55900000
48	NA	NA	NA	NA	NA	NA
49	Luxury Types	1999	40	921	61086000	155000000
51	Fireproof without Stores	1974	23	275	9074000	23700000
52	Fireproof with Stores	1978	48	852	52066000	135000000
53	Mixed: See Condo File	1982	42	261	15999609	38700022
56	Mixed: See Condo File	1986	20	51	4189479	10599997
57	Mixed: See Condo File	1985	30	423	20266797	51899968
58	Cooperatives (Other than Condominiums)	1987	26	185	8325000	21200000
59	Mixed: See Condo File	1987	41	119	7204321	18789996
62	Luxury Types	1998	48	404	37567800	86000000
63	Cooperatives (Other than Condominiums)	1984	26	148	6030000	14900000
69	Commercial	NA	NA	NA	46093561	107620004
70	Mixed: See Condo File	1986	33	174	16497750	42300007
83	Commercial	1989	44	NA	84903300	204870002
87	Commercial	1974	42	NA	106294571	262999999
99	Miscellaneous	1989	43	479	28026000	70200000
103	Mixed: See Condo File	1981	22	226	74379513	181200019
117	Mixed: See Condo File	1968	37	213	17584099	44050009
120	Fireproof with Stores	1979	31	232	13086000	36000000
128	NA	NA	NA	NA	NA	NA
135	Mixed: See Condo File	1985	67	246	47233178	116500000
138	Luxury Types	1979	36	396	18378000	48200000

139	Mixed: See Condo File	1987	43	482	37015547	87800000
140	Mixed: See Condo File	1969	33	168	13899952	34049998
145	Mixed: See Condo File	1975	57	236	26696949	66000000
149	Cooperatives (Other than Condominiums)	1973	32	270	8820000	21900000
151	Cooperatives (Other than Condominiums)	1972	19	165	5710000	14500000
152	Fireproof with Stores	1977	26	325	16551000	41000000
153	Fireproof with Stores	1981	35	279	14607000	37000000
154	Semi-Fireproof with Stores	1988	31	709	53730000	142000000
155	Mixed: See Condo File	0	35	NA	14879588	37842005
156	Fireproof with Stores	1972	33	300	16476000	38600000
157	Fireproof with Stores	1974	36	355	18936000	51400000
158	Fireproof with Stores	1975	20	218	9948000	26600000
159	Apartment Hotels	1987	37	250	14847000	40300000
161	Fireproof with Stores	1980	21	195	11241000	30100000
162	Cooperatives (Other than Condominiums)	1969	18	187	7037000	18400000
163	Semi-Fireproof with Stores	1985	35	706	48543000	135000000
164	Mixed: See Condo File	1983	33	485	30377422	77350039
165	Cooperatives (Other than Condominiums)	1966	24	238	4230900	11100000
166	Cooperatives (Other than Condominiums)	1974	26	117	4158000	10300000
167	Cooperatives (Other than Condominiums)	1975	35	263	12276000	36700000
169	Mixed: See Condo File	1984	29	118	6674143	17136995
170	Fireproof without Stores	1980	38	510	28015560	76900000
171	Mixed: See Condo File	1989	57	817	56446296	143899966
172	Mixed: See Condo File	0	32	586	21173423	57193000
173	Mixed: See Condo File	1988	50	234	16485814	42000005
177	Mixed: See Condo File	1986	41	362	21496705	53870004
178	Miscellaneous	1972	36	273	16479000	50800000
184	Mixed: See Condo File	1983	28	79	8813896	21499988
186	Mixed: See Condo File	1977	30	166	6830362	17000002
187	Fireproof with Stores	1981	32	248	15615000	43100000
188	Mixed: See Condo File	1980	20	113	5322008	13199998
189	NA	NA	NA	NA	NA	NA
190	Residential in Elevator Apartment Building	1982	44	231	18812470	46499994
191	Fireproof with Stores	1979	34	261	18147000	48500000
194	Luxury Types	2000	70	372	74610000	185000000
195	Mixed: See Condo File	1984	52	246	27362344	70649996
200	Mixed: See Condo File	1985	35	207	13555992	35130014
203	Mixed: See Condo File	1984	31	174	12007882	29899975
209	Cooperatives (Other than Condominiums)	1977	34	360	14412000	39200000
210	Mixed: See Condo File	1972	30	228	12156597	30440012
211	Fireproof without Stores	1982	37	323	30633000	75600000
212	Miscellaneous	1974	34	592	16605000	43000000
213	Mixed: See Condo File	1983	32	106	11126294	26830000
214	Cooperatives (Other than Condominiums)	1977	29	444	19162000	56800000
218	Cooperatives (Other than Condominiums)	1969	38	629	38790000	95200000
219	Fireproof with Stores	1981	24	42	4208400	10500000
222	Cooperatives (Other than Condominiums)	1974	35	224	13921000	36900000
223	Fireproof without Stores	1974	34	125	5138200	14200000
224	Cooperatives (Other than Condominiums)	1975	47	360	48108000	125000000
225	Cooperatives (Other than Condominiums)	1988	36	74	7804000	19000000
226	Mixed: See Condo File	NA	36	381	25495740	66821000
227	Luxury Types	1981	34	320	20709000	59300000
228	Mixed: See Condo File	1982	31	166	14960186	38130017
229	Mixed: See Condo File	NA	44	NA	61847335	153236998
230	Cooperatives (Other than Condominiums)	1974	30	158	12069000	31800000
231	Cooperatives (Other than Condominiums)	1981	26	277	16753000	44000000
232	Luxury Types	1979	32	547	49806000	136000000
233	Mixed: See Condo File	1969	42	655	70098105	172324989
234	Luxury Types	1994	39	1000	59720000	148000000

235	Churches, Synagogues, Chapels	1974	36	320	3294000	8500000
236	Cooperatives (Other than Condominiums)	1969	32	288	13315000	35600000
237	Cooperatives (Other than Condominiums)	1968	24	172	8145000	24100000
238	Cooperatives (Other than Condominiums)	1975	25	245	7477000	20100000
239	Luxury Types	1986	47	450	38561000	110000000
240	Mixed: See Condo File	1984	27	75	5247403	13534999
241	Mixed: See Condo File	1977	29	264	8603100	24350000
242	Cooperatives (Other than Condominiums)	1971	41	387	12345000	30500000
243	Mixed: See Condo File	1975	18	272	11781983	31545001
244	Cooperatives (Other than Condominiums)	1963	33	239	13041000	33000000
246	Mixed: See Condo File	1986	42	219	22374365	55200002
247	Mixed: See Condo File	1986	40	157	8277602	19999996
248	Miscellaneous	1999	37	200	0	0
249	Mixed: See Condo File	1986	32	110	6710120	17099991
250	Fireproof with Stores	1967	30	120	10093000	28600000
251	Cooperatives (Other than Condominiums)	1983	39	175	16560000	42200000
252	Mixed: See Condo File	1987	43	203	18442312	51969997
253	Fireproof with Stores	1968	30	112	7695000	22000000
254	Mixed: See Condo File	1986	50	295	33404270	83500005
255	Cooperatives (Other than Condominiums)	1968	31	180	10179000	25600000
256	Mixed: See Condo File	0	26	NA	20246797	50699994
257	Mixed: See Condo File	1986	40	128	9932240	25500002
258	Fireproof with Stores	1979	45	322	28350000	75900000
259	Fireproof with Stores	1973	31	172	14706000	36600000
260	Mixed: See Condo File	0	57	282	34260525	85283009
261	Cooperatives (Other than Condominiums)	1972	30	30	5180000	12900000
262	Fireproof without Stores	1975	35	268	22320000	55300000
263	Semi-Fireproof with Stores	1979	23	417	25045000	64700000
264	Mixed: See Condo File	1984	40	217	15933884	40200019
265	Residential in Elevator Apartment Building	1989	47	147	13046254	33900000
266	Mixed: See Condo File	0	44	202	24188261	61600002
268	Cooperatives (Other than Condominiums)	1967	37	235	10991000	30000000
269	Cooperatives (Other than Condominiums)	1975	35	138	4799700	13400000
270	Luxury Types	1977	37	490	28080000	76900000
271	Luxury Types	1986	50	414	34668000	89900000
272	Fireproof with Stores	1969	34	281	16695000	45200000
273	Mixed: See Condo File	1985	39	197	17794745	43900021
274	Fireproof with Stores	1979	32	470	29790000	79300000
275	Cooperatives (Other than Condominiums)	1981	30	163	13156000	33000000
276	Mixed: See Condo File	1974	34	538	25128114	60867012
277	Cooperatives (Other than Condominiums)	1973	25	148	5220000	13700000
278	Mixed: See Condo File	1972	27	126	10269512	27254014
279	Cooperatives (Other than Condominiums)	1966	25	45	8892000	22100000
280	Fireproof without Stores	1969	25	47	7344000	19800000
281	Mixed: See Condo File	0	33	328	15679737	40369014
282	Fireproof with Stores	1980	35	310	15741000	45000000
283	Fireproof with Stores	1972	31	269	13140000	40100000
284	Cooperatives (Other than Condominiums)	1973	42	123	13509000	33200000
285	Fireproof with Stores	1980	28	243	13662000	34900000
286	Fireproof with Stores	1977	30	261	15777000	39900000
287	Fireproof with Stores	1967	22	235	8537000	23000000
288	Miscellaneous	1994	43	180	23076000	54800000
289	Mixed: See Condo File	1986	28	88	6338540	16070000
290	Fireproof with Stores	1970	32	181	9572000	25400000
291	Cooperatives (Other than Condominiums)	1987	40	200	12717000	31700000
292	Mixed: See Condo File	1987	36	219	20066047	49083992
293	Cooperatives (Other than Condominiums)	1971	30	160	7997000	20800000
294	Cooperatives (Other than Condominiums)	1973	37	315	15069000	37600000
295	Mixed: See Condo File	1986	39	141	10606314	26849989

296	Cooperatives (Other than Condominiums)	1973	24	148	5390000	13400000
297	Cooperatives (Other than Condominiums)	1970	30	258	15273000	39800000
298	Fireproof with Stores	1975	30	402	30888000	85700000
301	Cooperatives (Other than Condominiums)	1973	30	210	14943000	37900000
300	Cooperatives (Other than Condominiums)	1973	30	106	4871400	12500000
302	Mixed: See Condo File	1987	44	253	15284670	38690007
303	Fireproof with Stores	1974	33	383	16758000	45700000
304	Cooperatives (Other than Condominiums)	1971	33	259	15678000	39700000
305	Cooperatives (Other than Condominiums)	1980	28	213	9836000	24500000
306	Mixed: See Condo File	0	38	249	20745650	51450000
307	Mixed: See Condo File	1984	32	212	18925648	48355013
308	Mixed: See Condo File	1986	48	221	12801892	33080021
309	Cooperatives (Other than Condominiums)	1980	30	367	15183000	38300000
310	Cooperatives (Other than Condominiums)	1974	32	309	12384000	29200000
311	Mixed: See Condo File	0	31	108	8039185	21047003
312	Fireproof with Stores	1980	29	252	15759000	42200000
313	Fireproof with Stores	1985	35	383	20754000	54800000
314	Fireproof with Stores	1986	35	1081	56610000	150000000
315	Semi-Fireproof without Stores	1988	24	48	1296900	2350000
316	Miscellaneous	1990	29	522	23496000	53000000

Other Property Type in Kayden's Book

Kayden #	Detailed Description	Year Built	No. of Stories	Residential Units	Assessed Value	Market Value
HOTELS						
26	Not Zoned Residential, or Manh below 110 St	0	0	0	2750040	6700000
41	Luxury Types - Built after 1960	1934	58	0	40473000	108000000
61	Dormitories	1974	15	58	3749400	9780000
80	Luxury Types - Built after 1960	1988	48	1	46935000	138000000
82	Luxury Types - Built after 1960	1985	58	1919	171110000	412000000
104	Luxury Types - Built after 1960	1980	51	0	67580000	190000000
115	Miscellaneous	1987	46	172	18144000	47100000
121	Luxury Types - Built after 1960	1987	57	0	54930000	140000000
134	Luxury Types - Built 1960 and Prior	1939	41	0	59499000	146600000
141	Luxury Types - Built after 1960	1972	43	0	33615000	84600000
174	Apartment Hotels	1971	25	0	10783000	26700000
179	Luxury Types - Built after 1960	1980	40	0	36477000	100000000
HOSPITALS & HEALTH FACILITIES						
55	Hospitals, Sanitariums, Mental Institutions	1992	16	0	109800000	240000000
150	Staff Facilities	1969	24	184	4530600	11500000
UTILITY BUREAU PROPERTIES						
66	Railroads, Private Ownership	0	0	0	0	0
168	Telephone Utilities	NA	10	NA	NA	NA
EDUCATIONAL FACILITIES						
68	Public, Elementary, Junior and Senior High Schools	1977	11	0	13860000	32000000
267	Other Colleges and Universities	1929	8	0	7659000	17500000
299	Miscellaneous	1976	4	0	5049000	11700000
RELIGIOUS FACILITIES						
160	Miscellaneous	1999	17	0	11513700	26000000

Part IV

Kayden's office In Bill's Data

Kayden #	Owner	Owner Address	Owner City	Owner State	Owner Zip
1	17 STATE ST, LLC C/O	400 PARK AVE FL 15	NEW YORK	NY	10022
2	STATE WHITEHALL CO	345 PARK AVE	NEW YORK	NY	10154
11	WATER STREET FEE LLC	777 3RD AVE	NEW YORK	NY	10017
12	OLD SLIP ASSOCIATES L P	1633 BROADWAY STE 1801	NEW YORK	NY	10019
14	DEGI DEUTSCHE GESELLSCHAFT	67 WALL ST	NEW YORK	NY	10005
15	EIGHTY-FIVE WALL ETC	85 WALL ST	NEW YORK	NY	10005
16	110 WALL STREET L.P.	345 PARK AVE	NEW YORK	NY	10154
17	100 WALL CO. LLC	10 E 50TH ST	NEW YORK	NY	10022
24	LIGHTHOUSE 100 WILLIA	2001 MARCUS AVE	LAKE SUCCESS	NY	11042
25	59 MAIDEN LANE ASSOCS	41 MAIDEN LN	NEW YORK	NY	10038
28	55 BROAD STREET COMPANY	345 PARK AVE	NEW YORK	NY	10154
29	40 BROAD DELAWARE, IN	255 SHORELINE DR	REDWOOD CITY	CA	94065
33	45 BROADWAY LLC C/O C	42 BROADWAY STE 1548	NEW YORK	NY	10004
35	90 WASHINGTON LLC	384 5TH AVE FL 3	NEW YORK	NY	10018
36	NEW 40 RECTOR STREET	40 RECTOR ST RM 1410	NEW YORK	NY	10006
38	WFP ONE LIBERTY PLAZA CO LP	165 BROADWAY FL 6	NEW YORK	NY	10006
39	MSDW 140 BROADWAY PRO	140 BROADWAY	NEW YORK	NY	10005
45	TST 375 HUDSON, L.L.C.	520 MADISON AVE	NEW YORK	NY	10022
54	GREEN W. 57TH ST. LLC	420 LEXINGTON AVE	NEW YORK	NY	10170
60	41 MADISON CO, L.P.	345 PARK AVE	NEW YORK	NY	10154
64	475 PARK AVE SOUTH COMPANY	750 LEXINGTON AVE FL 29	NEW YORK	NY	10022
65	CARYLE/SL GREEN 1250	420 LEXINGTON AVE	NEW YORK	NY	10170
67	1 PENN PLAZA LLC	PARK 80 WEST PLZ II 9TH FLOOR	SADDLE BROOK	NJ	07663
71	1411 TRIZEC HAHN-SWIG LLC	1411 BROADWAY RM 3150	NEW YORK	NY	10018
73	489 FIFTH LLC	489 5TH AVE	NEW YORK	NY	10017
75	101 PARK AVENUE REALTY CORP	101 PARK AVE	NEW YORK	NY	10178
76	6 EAST 43RD STREET CO	5 E 43RD ST	NEW YORK	NY	10017
77	1114 TRIZEC HAHN-SWIG LLC	1411 BROADWAY	NEW YORK	NY	10018
78	DOLP 1133 PROPERTIES	1155 AVENUE OF THE AMERIC	NEW YORK	NY	10036
79	DOLP 1133 PROPERTIES	1155 AVENUE OF THE AMER	NEW YORK	NY	10036
85	1185 SIXTH LLC C/O HO	400 PARK AVE	NEW YORK	NY	10022
92	BP 280 PARK AVE LLC C	599 LEXINGTON AVE	NEW YORK	NY	10022
93	MADISON AVE LEASEHOLD LLC	777 3RD AVE	NEW YORK	NY	10017
94	KATO INTERNATIONAL LL	12 E 49TH ST	NEW YORK	NY	10017
96	NA	NA	NA	NA	NA
97	ROCK MC GRAW INC	1221 6TH AVE	NEW YORK	NY	10020
100	M R I BWAY RENTAL INC	1633 BROADWAY	NEW YORK	NY	10019
101	1285 ASSOCIATES LIMITED PARTNE	787 7TH AVE	NEW YORK	NY	10019
102	650 FIFTH AVENUE COMPANY	500 5TH AVE STE 3900	NEW YORK	NY	10110
109	NEW MILLENNIUM ESTATES LTD	605 3RD AVE	NEW YORK	NY	10158
110	TISHMAN SPEYER ET AL	520 MADISON AVE	NEW YORK	NY	10022
112	CBS INC	527 W 57TH ST	NEW YORK	NY	10019
113	DESPA FIRST REAL ESTA	522 5TH AVE	NEW YORK	NY	10036
114	1301 PROPERTIES, L.L.	520 MADISON AVE	NEW YORK	NY	10022
118	METROPOLITAN 810 7TH	225 BROADHOLLOW RD	MELVILLE	NY	11747
119	SHUBERT FOUNDATION IN	1690 BROADWAY	NEW YORK	NY	10019
122	CITYSPIRE	1501 BROADWAY FRNT 4	NEW YORK	NY	10036
123	1345 LEASEHOLD LIMITED PARTNERSHIP	299 PARK AVE FL 42	NEW YORK	NY	10171
124	1350 LLC	225 BROADHOLLOW RD	MELVILLE	NY	11747
125	WB STELLAR 1370 AVENU	156 WILLIAM ST	NEW YORK	NY	10038
126	712 FIFTH AVENUE L.P.	1633 BROADWAY STE 1801	NEW YORK	NY	10019
129	EOP MIDTOWN PROPERTIE	850 3RD AVE	CHICAGO	IL	60606

130	450 PARK AVE ASSOCS	1370 AVENUE OF THE AMERIC	NEW YORK	NY	10019
132	GMAC COMMERCIAL MORTGAGE	650 DRESHER RD	HORSHAM	PA	19044
133	LEFRAK SBN LIMITED PARTNERSHIP	9777 QUEENS BLVD	FLUSHING	NY	11374
136	NA	NA	NA	NA	NA
143	TRUMP 767 FIFTH AVENU	725 5TH AVE	NEW YORK	NY	10022
148	PARK BUILDING ASSOC	499 PARK AVE	NEW YORK	NY	10022
175	GALE & WENTWORTH	200 CAMPUS DR STE 200	FLORHAM PARK	NJ	07932
176	622 THIRD AVE. CO. LL	750 LEXINGTON AVE	NEW YORK	NY	10022
182	GRAND REGENT LLC	142 W 57TH ST	NEW YORK	NY	10019
183	CALIFORNIA STATE TEAC	7667 FOLSOM BLVD	SACRAMENTO	CA	95826
192	4 THIRD AVE LEASEHOLD LLC	777 3RD AVE	NEW YORK	NY	10017
193	DUIT RLTY CORP-% L RUBEN	600 MADISON AVE FL 20	NEW YORK	NY	10022
197	767THIRD AVENUE LLC	777 3RD AVE	NEW YORK	NY	10017
198	7 3 AVE LEASEHOLD LLC	777 3RD AVE	NEW YORK	NY	10017
199	TIAA CREF	730 3RD AVE	NEW YORK	NY	10017
204	DOLP 825 PROPERTIES L	1155 AVENUE OF THE AMER	NEW YORK	NY	10036
206	CITIBANK N A	51 W 52ND ST # 10	NEW YORK	NY	10019
215	LASZLO N. TAUBER & AS	5110 RIDGEFIELD RD STE 404	BETHESDA	MD	20816
216	900 3RD AVE. L P C/O	1633 BROADWAY STE 1801	NEW YORK	NY	10019
217	METROPOLITAN 919 3RD	10 E 50TH ST	NEW YORK	NY	10022
220	950 THIRD AVE CO L P	565 5TH AVE	NEW YORK	NY	10017
221	RALPH A KUPLER TRUST	3800 MAPLEWOOD AVE	DALLAS	TX	75205

Kayden's office not in Bill's Data

Kayden #	Owner	Owner Address	Owner City	Owner State	Owner Zip
3	ONE STATE ST LLC	1 STATE ST	NEW YORK	NY	10004
4	NA	NA	NA	NA	NA
5	SULLIVAN & CROMWELL	125 BROAD ST	NEW YORK	NY	10004
6	CHEMICAL BANK	PO BOX 3147	NEW YORK	NY	10163
7	METROPOLITAN LIFE INSURANCE CO	1 MADISON AVE	NEW YORK	NY	10010
8	SEVEN HANOVER ASSOCIATES LLC	1271 AVENUE OF THE AMERIC # 4200	NEW YORK	NY	10020
9	NA	NA	NA	NA	NA
10	TEN HANOVER LLC C/O S	220 E 42ND ST	NEW YORK	NY	10017
13	NA	NA	NA	NA	NA
18	ORIENT OVERSEAS ASSOC	88 PINE ST	NEW YORK	NY	10005
19	FLANAGAN CNA	PO BOX 811097	CHICAGO	IL	60681
20	NA	NA	NA	NA	NA
21	WATER STREET LEASHOLD INTEREST LLC	180 WATER ST	NEW YORK	NY	10038
23	NEW ENGLAND MUTUAL LIFE INS CO	501 BOYLSTON ST	BOSTON	MA	02116
27	MOORGAN GTY TR CO-N Y	23 WALL ST	NEW YORK	NY	10005
30	52 HABITAT	110 E 59TH ST FL 37	NEW YORK	NY	10022
31	THE BANK OF NEW YORK	100 CHURCH ST	NEW YORK	NY	10007
32	BANK OF COMMUNICATIONS	55 BROADWAY	NEW YORK	NY	10006
34	NA	NA	NA	NA	NA
37	BANKERS TRUST CO	130 LIBERTY ST	NEW YORK	NY	10006
40	BBV US REAL ESTATE FUND	150 E 42ND ST	NEW YORK	NY	10017
42	BANK OF NEW YORK	100 CHURCH ST FL 8	NEW YORK	NY	10007
44	SMITH BARNEY INC	388 GREENWICH ST # 15	NEW YORK	NY	10013
50	EOP-WORLDWIDE PLAZA L	2 N RIVERSIDE PLZ	CHICAGO	IL	60606
72	NEW YORK TELEPHONE CO	1095 AVENUE OF THE AMERIC	NEW YORK	NY	10036
74	PHILIP MORRIS CO INC	120 PARK AVE	NEW YORK	NY	10017
81	VIACOM INTERNATIONAL INC&AFFILIATESC/O VIACOM INTERNATIONAL INC	1515 BROADWAY	NEW YORK	NY	10036
84	DOLP 114 PROPERTIES L	1155 AVENUE OF THE AMER	NEW YORK	NY	10036
86	JT 1211, LP	1221 AVENUE OF THE AMERIC	NEW YORK	NY	10020
88	575 FIFTH ASSOCIATES	111 GREAT NECK RD	GREAT NECK	NY	11021
89	383 MADISON LLC	80 PINE ST	NEW YORK	NY	10005

90	BROOKFIELD FINANCIAL PROPERTIES	165 BROADWAY FL 6	NEW YORK	NY	10006
91	FISHER PARK LANE CO	299 PARK AVE FL 42	NEW YORK	NY	10171
95	NA	NA	NA	NA	NA
98	745 7TH AVE PARKING CORP	1585 BROADWAY	NEW YORK	NY	10036
105	40 EAST 52ND STREET L P	345 PARK AVE	NEW YORK	NY	10154
106	NA	NA	NA	NA	NA
107	560 LEXCO	345 PARK AVE	NEW YORK	NY	10154
108	55 E 52ND ST LTD C/O	575 5TH AVE	NEW YORK	NY	10017
111	40 WEST 53RD PARTNERSHIP	885 3RD AVE STE 2700	NEW YORK	NY	10022
116	1325 AVENUE OF THE AM	1633 BROADWAY STE 1801	NEW YORK	NY	10019
127	AT&T RESOURCE MGMT INC	222 MOUNT AIRY RD	BASKING RIDGE	NJ	07920
131	BHF BANK AKTIENGESELLSCHAFT CORP	55 E 59TH ST	NEW YORK	NY	10022
137	888 SEVENTH AVENUE LL	PARK 80 WEST PLAZA I	SADDLE BROOK	NJ	07663
142	SOLOW BUILDING COMPANY LLC	9 W 57TH ST	NEW YORK	NY	10019
144	EQUITABLE LIFE ASSURANCE INC	500 PARK AVE	NEW YORK	NY	10022
146	135 EAST 57TH STREET LLC	750 LEXINGTON AVE FL 29	NEW YORK	NY	10022
147	TENDER ASSOC	110 E 59TH ST FL 37	NEW YORK	NY	10022
180	DOLP 825 PROPERTIES L	1155 AVENUE OF THE AMER	NEW YORK	NY	10036
181	SLR LIMITED PARTNERSH	245 PARK AVE	NEW YORK	NY	10167
185	HOUSING PRESERVATION & DEVELOPMENT	100 GOLD ST FL 7	NEW YORK	NY	10038
195	FEDERAL REPUBLIC OF GERMANY	56 PARK AVE	NEW YORK	NY	10016
196	LIBYAN ARAB REPUBLIC	309 E 48TH ST	NEW YORK	NY	10017
201	LWE ASSOC	9 E 40TH ST	NEW YORK	NY	10016
202	MADISON THIRD BLDG COMPANIES LLC	750 LEXINGTON AVE	NEW YORK	NY	10022
205	BOSTON PROPERTIES LTD PARTNERSHIP	800 BOYLSTON ST	BOSTON	MA	02199
208	HOGAN AND HARTSON	555 THIRTEENTH ST	WASHINGTON	DC	20004
245	750 LEXINGTON AVE ASS	805 3RD AVE	NEW YORK	NY	10022

Residential in Kayden's Book

Kayden #	Owner	Owner Address	Owner City	Owner State	Owner Zip
22	127 JOHN ST REALTY LLC	309 E 45TH ST	NEW YORK	NY	10017
43	TRIBECA EQUITY PARTNERS L P	625 MADISON AVE	NEW YORK	NY	10022
46	HILARY GARDENS COMPAN	6435 YELLOWSTONE BLVD	FLUSHING	NY	11375
47	GEORGETOWN PLZ OWNERS CORP	380 MADISON AVE	NEW YORK	NY	10017
48	NA	NA	NA	NA	NA
49	RIVER PLACE I LLC	521 5TH AVE	NEW YORK	NY	10175
51	MARBRU ASSOC	429 E 52ND ST	NEW YORK	NY	10022
52	SOUTHCROFT CO	380 MADISON AVE	NEW YORK	NY	10017
53	THE COLONNADE CONDOMINIUM	9 E 38TH ST FL 6	NEW YORK	NY	10016
56	108 5TH AVE CONDOMINIUM	60 E 42ND ST RM 1250	NEW YORK	NY	10165
57	MADISON GREEN CONDOMINIUM	200 MADISON AVE FL 5	NEW YORK	NY	10016
58	LEX TENANTS CORP	675 3RD AVE	NEW YORK	NY	10017
59	THE STANFORD CONDOMINIUM	5 E 86TH ST	NEW YORK	NY	10028
62	ROSE 29 LLC	200 MADISON AVE FL 5	NEW YORK	NY	10016
63	THE ASCOT OWNERS INC	101 PARK AVE	NEW YORK	NY	10178
69	NA	NA	NA	NA	NA
70	FIFTH AVE CONDO - B.H.S. MGMNT(445)	770 LEXINGTON AVE	NEW YORK	NY	10021
83	BERTELSMANN PROPERTY INC	1540 BROADWAY STE 24	NEW YORK	NY	10036
87	NA	NA	NA	NA	NA
99	CS RITZ HOLDINGS L P	235 W 48TH ST	NEW YORK	NY	10036
103	OLYMPIC TOWER SHARED	641 5TH AVE	NEW YORK	NY	10022
117	NAME NOT ON FILE	159 W 53RD ST	NEW YORK	NY	10019
120	GOODSTEIN & HOFFMAN CO	211 E 46TH ST FL 5	NEW YORK	NY	10017
128	NA	NA	NA	NA	NA
135	NORDICK INTERNATIONAL INC	19707 TURNBERRY WAY APT 27E	MIAMI	FL	33180
138	211 WEST 56TH ASSOCIA	1752 BROADWAY	NEW YORK	NY	10019

139	BROADWAY 56TH STREET ASSOCIA	110 E 59TH ST	NEW YORK	NY	10022
140	NAME NOT ON FILE	58 W 58TH ST	NEW YORK	NY	10019
145	THE GALLERIA CONDO	117 E 57TH ST	NEW YORK	NY	10022
149	PARK TOWERS TENANTS CORP	211 E 46TH ST FL 5	NEW YORK	NY	10017
151	CRYSTAL HOUSE OWNERS INC	1035 2ND AVE	NEW YORK	NY	10022
152	WARD CONST CO	463 2ND AVE	NEW YORK	NY	10016
153	H & P 29 ST ASSOCIATES	1271 AVENUE OF THE AMERIC RM 4200	NEW YORK	NY	10020
154	DPNY INC.	56 E 87TH ST	NEW YORK	NY	10016
155	FUTURE COWA INC	103 W 55TH ST	NEW YORK	NY	10019
156	PLAZA RLTY INVESTORS INC	6435 YELLOWSTONE BLVD	FOREST HILLS	NY	11375
157	HKAL 34TH STREET LIMI	300 E 34TH ST	NEW YORK	NY	10016
158	DS & D LAND COMPANY	101 W 55TH ST	NEW YORK	NY	10019
159	THE DENIHAN COMPANY	505 E 75TH ST	NEW YORK	NY	10021
161	34 ST SO CO	101 W 55TH ST	NEW YORK	NY	10019
162	132 E 35 ST OWNERS INC	360 LEXINGTON AVE	NEW YORK	NY	10017
163	RIVERGATE LP	101 W 55TH ST	NEW YORK	NY	10019
164	NAME NOT ON FILE	630 1ST AVE	NEW YORK	NY	10016
165	AKAM ASSOCIATES	420 LEXINGTON AVE RM 1420	NEW YORK	NY	10170
166	AKAM ASSOCIATES	420 LEXINGTON AVE RM 1420	NEW YORK	NY	10170
167	MURRY HILL MEWS OWNRS	560 3RD AVE	NEW YORK	NY	10016
169	THE WHITNEY CONDOMINIUM	331 MADISON AVE	NEW YORK	NY	10017
170	LENMARK CO LLC	9 CRESTHOLLOW LN	ALBERTSON	NY	11507
171	MICHAEL BOBELIAN	330 E 38TH ST APT 15C	NEW YORK	NY	10016
172	NAME NOT ON FILE	300 E 40TH ST	NEW YORK	NY	10016
173	HIGHPOINT CONDOMINIUM	4 PARK AVE FL 3	NEW YORK	NY	10016
177	VANDERBILT CONDOMINUM	200 MADISON AVE	NEW YORK	NY	10016
178	40TH REALTY LLC	1200 UNION TPKE	NEW HYDE PARK	NY	11040
184	43ST SECOND AVE CORP	806 2ND AVE	NEW YORK	NY	10017
186	LAUSANNE CONDOMINIUM	10 E 40TH ST	NEW YORK	NY	10016
187	E. 46TH REALTY LLC	1200 UNION TPKE	NEW HYDE PARK	NY	11040
188	301 E 45 ST CONDO	419 PARK AVE	NEW YORK	NY	10022
189	NA	NA	NA	NA	NA
190	DAG HAMMARSKJOLD TOWER -C/O B.H.S	770 LEXINGTON AVE FL 5	NEW YORK	NY	10021
191	L'ECOLE ASSOCIATES, L.P.	211 E 46TH ST	NEW YORK	NY	10017
194	UNITED ENG TRUST	345 E 47TH ST	NEW YORK	NY	10017
195	100 UNITED NATIONS PLZ CONDO	4 PARK AVE FL 3	NEW YORK	NY	10016
200	THE COSMO CONDO	380 MADISON AVE	NEW YORK	NY	10017
203	STERCINLPLAZA CONDOMINIUM	211 E 46TH ST	NEW YORK	NY	10017
209	CONNAUGHT TOWER CORP	300 E 54TH ST	NEW YORK	NY	10022
210	NAME NOT ON FILE	400 E 54TH ST	NEW YORK	NY	10022
211	RIVER TOWER ASSOCIATES	142 W 57TH ST	NEW YORK	NY	10019
212	SAN DAR ASSOCIATES CO	429 E 52ND ST	NEW YORK	NY	10022
213	KARISIK CHARLES	415 E 54 ST 29C	NEW	NY	NA
214	STARK BEATRICE	675 3RD AVE FL 6	NEW YORK	NY	10017
218	JEROME L HARRIS	19 NORTHGATE CIR	MELVILLE	NY	11747
219	WEINBERG PROPERTIES	122 E 42ND ST	NEW YORK	NY	10168
222	LANDMARK OWNERS INC	415 MADISON AVE	NEW YORK	NY	10017
223	MID STATE MANAGEMENT CORP	9777 QUEENS BLVD	FLUSHING	NY	11374
224	SOVEREIGN APARTMENTS INC	18 E 48TH ST	NEW YORK	NY	10017
225	418 EAST 59TH ST OWNERS CORP	418 EAST EAST 59TH ST	NEW YORK	NY	10128
226	COLUMBUS AMSTERDAM ASSOCIATES	425 W 59TH ST FL 10	NEW YORK	NY	10019
227	COLUMBUS 60TH REALTY ASSOC	1200 UNION TPKE	NEW HYDE PARK	NY	11040
228	SANG LEE	PO BOX 667	FRANKLIN LAKES	NJ	07417
229	NA	NA	NA	NA	NA
230	GREENTHAL MANAGEMENT	4 PARK AVE FL 3	NEW YORK	NY	10016
231	61 WEST 62ND STREET OWNERS CORP	61 W 62ND ST	NEW YORK	NY	10023
232	S & P ASSOCIATES	1271 AVENUE OF THE AMERIC BSMT 4	NEW YORK	NY	10020
233	ONE LINCOLN PLAZA CONDO	1271 6TH AVE RM 4200	NEW YORK	NY	10020
234	BRODCOM W DEVELOPMENT CO	400 W 59TH ST	NEW YORK	NY	10019

235	HO PARTNERSHIP	117 WEST 17 ST, 4 H	NEW YORK	NY	10011
236	10 W66TH ST CORP	10 W 66TH ST # 2FL	NEW YORK	NY	10023
237	80 CPW APTS CORP	211 E 46TH ST	NEW YORK	NY	10017
238	RASKIN MATZA & COHEN	555 MADISON AVE	NEW YORK	NY	10022
239	AMSTERCO	150 E 58TH ST FL 28	NEW YORK	NY	10155
240	BEL CANTO CONDO ASSN	1991 BROADWAY APT 22C	NEW YORK	NY	10023
241	THE NEVADA OWNERS INC	565 5TH AVE FL 11	NEW YORK	NY	10017
242	SHERMAN SQ REALTY CORP	228 E 45TH ST FL 5	NEW YORK	NY	10017
243	NAME NOT ON FILE	380 AMSTERDAM AVE	NEW YORK	NY	10024
244	118 E 60 OWNERS INC	118 E 60TH ST	NEW YORK	NY	10022
246	NAME NOT ON FILE	200 E 61ST ST	NEW YORK	NY	10021
247	EVANS VIEW CONDOMINIUM CORP	380 MADISON AVE	NEW YORK	NY	10017
248	EAST 60TH STREET ASSOCIATES LP	400 W 59TH ST	NEW YORK	NY	10019
249	THE PALADIN CONDOMINIUMM	855 AVENUE OF THE AMERIC	NEW YORK	NY	10001
250	WELLINGTON ESTATES LTD	P O BOX 185	NEW YORK	NY	10004
251	TRUMP PLAZA OWNERS INC	352 PARK AVE S FL 9	NEW YORK	NY	10010
252	THE ROYALE CONDOMINIUM	331 MADISON AVE	NEW YORK	NY	10017
253	64 STREET THIRD AVE ASSOC	340 E 46TH ST	NEW YORK	NY	10017
254	200-10 E 65 ST CONDO	1271 AVENUE OF THE AMERIC # 4200	NEW YORK	NY	10020
255	BARKOURAS GEORGE	160 E 65TH ST # 32	NEW YORK	NY	10021
256	GEORGETOWN CONCORDE LP C/O GEORGETOWN GROUP	2109 BROADWAY	NEW YORK	NY	10023
257	CONDOMINIUM & SPA	304 E 65TH ST	NEW YORK	NY	10021
258	TOWNHOUE COMPANY L L	9 W 57TH ST	NEW YORK	NY	10019
259	254 E 68TH ST INC	345 PARK AVE	NEW YORK	NY	10154
260	TRUMP PALACE COMPANY	725 5TH AVE	NEW YORK	NY	10022
261	733 TENANTS CORP	675 3RD AVE FL 6	NEW YORK	NY	10017
262	211 EAST 70TH ST CO	345 PARK AVE	NEW YORK	NY	10154
263	TRANSWORLD EQUITIES	150 E 58TH ST FL 28	NEW YORK	NY	10155
264	KINGSLEY CONDO	331 MADISON AVE	NEW YORK	NY	10017
265	BELAIRE CONDOMINIUM ASSOC	415 MADISON AVE	NEW YORK	NY	10017
266	OXFORD CONDO	51 E 42ND ST	NEW YORK	NY	10017
268	AKAM ASSOCIATES	420 LEXINGTON AVE RM 1420	NEW YORK	NY	10170
269	FONTAINE OWNERS CORP	353 E 72ND ST	NEW YORK	NY	10021
270	EAST 72ND REALTY LLC	1200 UNION TPKE	NEW HYDE PARK	NY	11040
271	SOLOW MGMT CORP	9 W 57TH ST	NEW YORK	NY	10019
272	RIVER YORK STRATFORD	1200 UNION TPKE	NEW HYDE PARK	NY	11040
273	SARATOGA	16 E 32ND ST FL 3	NEW YORK	NY	10016
274	ARWIN 74TH ST CO	1200 UNION TPKE	NEW HYDE PARK	NY	11040
275	79 ST & EAST END AVE CORP	675 3RD AVE FL 6	NEW YORK	NY	10017
276	GEORGE MOSQUIN	PO BOX 464	COLD SPRING HARBOR	NY	11724
277	178 E 80 ST OWNERS INC	228 E 45TH ST RM 1800	NEW YORK	NY	10017
278	PARK 900 CONDOMINIUM	10 E 40TH ST FL 45	NEW YORK	NY	10016
279	980 FIFTH AVENUE CORPORATION	675 3RD AVE FL 6	NEW YORK	NY	10017
280	985 FIFTH AVENUE LLC	730 5TH AVE STE 2202	NEW YORK	NY	10019
281	EAST WINDS CONDOMINIUM	101 PARK AVE	NEW YORK	NY	10178
282	80-81 FIRST ASSOCIATES	110 E 59TH ST FL 37	NEW YORK	NY	10022
283	CALDWELL APARTMENTS	1200 UNION TPKE	NEW HYDE PARK	NY	11040
284	AKAM ASSOCIATES	420 LEXINGTON AVE RM 1420	NEW YORK	NY	10170
285	KENNETH FUCHSMAN	1445 3RD AVE	NEW YORK	NY	10028
286	GREENPOINT HOLDING CO; LIQ TRUST	52 VANDERBILT AVE	NEW YORK	NY	10017
287	GIFFUNI BROS	351 E 83RD ST	NEW YORK	NY	10028
288	MANOUCHER KHAGHAN	1608 1ST AVE	NEW YORK	NY	10028
289	NAME NOT ON FILE	401 E 84TH ST	NEW YORK	NY	10028
290	ADAMS TOWER LIMITED P	300 E 34TH ST	NEW YORK	NY	
291	300 E 85TH HOUSING CORP	675 3RD AVE FL 6	NEW YORK	NY	10017
292	EVANS TOWER CONDOMINIUM	171 E 84TH ST	NEW YORK	NY	10028
293	KREISEL CO INC	331 MADISON AVE # 136	NEW YORK	NY	10017
294	444 EAST 86 STREET OWNERS CORP	7 PENN PLZ STE 1400	NEW YORK	NY	10001

295	CHANNEL CLUB CONDONINIUM	675 3RD AVE	NEW YORK	NY	10017
296	301 E 87 ST OWENER INC	101 PARK AVE	NEW YORK	NY	10178
297	250 E 87TH OWNERS	4 PARK AVE	NEW YORK	NY	10016
298	BUILTLAND PARTNERS	1271 6TH AVE RM 4200	NEW YORK	NY	10020
301	PARK REGIS APT CORP	4 PARK AVE	NEW YORK	NY	10016
300	1065 PARK AVENUE CORP	575 MADISON AVE	NEW YORK	NY	10022
302	BEARD OF MANAGER OF THE MONARCH CONDO	175 MEMORIAL HWY	NEW ROCHELLE	NY	10801
303	ARLIT FLUSHING ASSOCIATES	1200 UNION TPKE	NEW HYDE PARK	NY	11040
304	1725 YORK OWNERS CORP	415 MADISON AVE	NEW YORK	NY	10017
305	CHARLES H GREENTHAL MANAGEMENT	4 PARK AVE FL 3	NEW YORK	NY	10016
306	THE 45 EAST 89TH ST CONDO	380 MADISON AVE	NEW YORK	NY	10017
307	SCURRY PAMELA	1327 MADISON AVE	NEW YORK	NY	10128
308	WATERFORD CONDOMINIUM	16 E 32ND ST FL 3	NEW YORK	NY	10016
309	340 EAST 93RD STREET CORP	675 3RD AVE	NEW YORK	NY	10017
310	MILLROCK OWNERS CORP	156 W 56TH ST FL 5	NEW YORK	NY	10019
311	NAME NOT ON FILE	301 W 98TH ST	NEW YORK	NY	10025
312	P & S 95TH STREET ASS	30 ROCKEFELLER PLZ	NEW YORK	NY	10112
313	YORKVILLE PLAZA ASSOC	1271 AVENUE OF THE AMERIC RM 4200	NEW YORK	NY	10020
314	M F ASSOCIATES	1271 AVENUE OF THE AMERIC	NEW YORK	NY	10020
315	1850 SECOND AVE ASSOCIATES LP	625 MADISON AVE	NEW YORK	NY	10022
316	RELATED 96TH ST. ASSOC.	625 MADISON AVE	NEW YORK	NY	10022

Other Property Type in Kayden's Book

Kayden #	Owner	Owner Address	Owner City	Owner State	Owner Zip
HOTELS					
26	LIBERTY STREET REALTY	1200 UNION TPKE	NEW HYDE PARK	NY	11040
41	THE MILLENIUM HILTON	55 CHURCH ST	NEW YORK	NY	10007
61	F I T STAFF HSG CO	230 W 27TH ST	NEW YORK	NY	10001
80	CDL WEST 45TH STREET	442 ORCHARD RD	SINGAPORE	NA	NA
82	TIMES SQ MARQUIS HOTEL, L.P	10400 FERNWOOD RD	BETHESDA	MD	20817
104	ARCHDIOCESE OF N Y	1011 1ST AVE	NEW YORK	NY	10022
115	EURO AMERICAN LODGING CORP	444 MADISON AVE	NEW YORK	NY	10022
121	LILLIAN GOLDMAN MARITAL	640 5TH AVE	NEW YORK	NY	10019
134	PMGP ASSOCIATES L P	51 SOMERSET DR S	GREAT NECK	NY	11020
141	THE PK LANE HOTEL INC	36 CENTRAL PARK S	NEW YORK	NY	10019
174	PATRICK DENIHAN	505 E 75TH ST	NEW YORK	NY	10021
179	DOMESTIC PROPERTIES I	345 PARK AVE	NEW YORK	NY	10154
HOSPITALS & HEALTH FACILITIES					
55	CHI HUNG CHEIN	1317 ELIZABETH ST, 410	NEW YORK	NY	10013
150	EAST 17TH STREET PROPERTIES INC	3201 KINGS HWY	BROOKLYN	NY	11234
UTILITY BUREAU PROPERTIES					
66	NATIONAL RAILROAD PASSENGER CORP	400 W 31ST ST	NEW YORK	NY	10001
168	NYNEX	101 WILLOUGHBY ST RM 200	BROOKLYN	NY	11201
EDUCATIONAL FACILITIES					
68	THREE PARK AVENUE BUI	750 LEXINGTON AVE	NEW YORK	NY	10022
267	220 E 72ND ST CO	800 5TH AVE	NEW YORK	NY	10021
299	115-87 OWNERS CORP	116 JOHN ST	NEW YORK	NY	10038
RELIGIOUS FACILITIES					
160	NATIONAL CENTER FOUNDATION	524 NORTH AVE	NEW ROCHELLE	NY	10801

Appendix 2:
Regression Round One on the 475 Observations

This round includes all the variables encompassing SFMIN, SFMAX and TOT.

Exhibit 1: Regression with PS_3
Dependent Variable: LSLOW
Method: Least Squares
Sample: 1 475
Included observations: 475

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4958.478	402.9571	12.30522	0.0000
AGE	-1.874554	2.654721	-0.706121	0.4805
CONTIG	0.004270	0.001911	2.234618	0.0259
D_CLS	-540.8332	106.2812	-5.088703	0.0000
D_GC	-2.661699	2.132043	-1.248427	0.2125
D_REN	188.7860	173.4419	1.088468	0.2770
FLOORS	11.45465	5.718937	2.002933	0.0458
NRA	0.000222	0.000218	1.018673	0.3089
NST	-3.391796	6.936700	-0.488964	0.6251
PS_3	406.5516	191.3403	2.124757	0.0342
SFMAX	-0.049752	0.034794	-1.429894	0.1534
SFMIN	0.230174	0.072403	3.179045	0.0016
TOT	-3.04E-05	0.001117	-0.027180	0.9783
SUBLET	-0.005514	0.001776	-3.103933	0.0020
VAC_NRA	-1466.253	527.4725	-2.779771	0.0057
D_23_28	282.4198	713.2915	0.395939	0.6923
D_24	-74.63604	575.1544	-0.129767	0.8968
D_25	54.84339	487.1393	0.112583	0.9104
D_26	-28.51323	628.1423	-0.045393	0.9638
D_27	120.2111	681.2477	0.176457	0.8600
D_30	-278.7315	245.1258	-1.137096	0.2561
D_31	-353.1777	269.8714	-1.308689	0.1913
D_32	250.3440	283.8992	0.881806	0.3784
D_33	1027.853	292.3933	3.515311	0.0005
D_34	1277.927	303.9896	4.203853	0.0000
D_35	-633.3097	364.8394	-1.735859	0.0833
D_36	1494.931	305.1029	4.899761	0.0000
D_37	671.3704	335.4683	2.001293	0.0460
D_38	537.8081	360.2539	1.492858	0.1362
D_39_40	309.2412	288.3337	1.072512	0.2841

R-squared	0.589238	Mean dependent var	4102.701
Adjusted R-squared	0.562469	S.D. dependent var	1409.003

Exhibit 2: Regression with PS_4
Dependent Variable: LSLOW
Method: Least Squares
Sample: 1 475
Included observations: 475

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4904.970	408.1614	12.01723	0.0000
AGE	-1.854328	2.723632	-0.680829	0.4963
CONTIG	0.004047	0.001908	2.120761	0.0345
D_CLS	-532.3766	106.3939	-5.003829	0.0000
D_GC	-2.622255	2.136069	-1.227608	0.2202
D_REN	162.7968	173.8841	0.936237	0.3497
FLOORS	11.07967	5.758339	1.924108	0.0550
NRA	0.000260	0.000216	1.204383	0.2291
NST	-3.148183	6.954834	-0.452661	0.6510
PS_4	296.7396	178.6593	1.660925	0.0974
SFMAX	-0.052900	0.034855	-1.517708	0.1298
SFMIN	0.234918	0.072491	3.240674	0.0013
TOT	3.30E-05	0.001120	0.029458	0.9765
SUBLET	-0.005583	0.001781	-3.135358	0.0018
VAC_NRA	-1443.757	528.6841	-2.730851	0.0066
D_23_28	312.3751	715.0732	0.436844	0.6624
D_24	-57.00546	576.6293	-0.098860	0.9213
D_25	68.32910	488.4941	0.139877	0.8888
D_26	-15.83909	629.6637	-0.025155	0.9799
D_27	117.5626	682.5793	0.172233	0.8633
D_30	-255.3271	245.9330	-1.038198	0.2997
D_31	-324.4738	270.9022	-1.197753	0.2317
D_32	292.4066	285.7467	1.023307	0.3067
D_33	1081.996	294.6134	3.672596	0.0003
D_34	1334.229	306.4653	4.353604	0.0000
D_35	-609.6523	366.2173	-1.664728	0.0967
D_36	1522.652	305.5887	4.982685	0.0000
D_37	718.6317	336.7564	2.133981	0.0334
D_38	583.7271	360.5840	1.618838	0.1062
D_39_40	340.9361	289.0416	1.179540	0.2388

R-squared	0.587627	Mean dependent var	4102.701
Adjusted R-squared	0.560754	S.D. dependent var	1409.003

Exhibit 3: Regression with PS_5
Dependent Variable: LSLOW
Method: Least Squares
Sample: 1 475
Included observations: 475

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4985.851	408.6619	12.20043	0.0000
AGE	-2.883466	2.803963	-1.028354	0.3043
CONTIG	0.003944	0.001915	2.059550	0.0400
D_CLS	-530.5438	106.7047	-4.972077	0.0000
D_GC	-2.645186	2.144300	-1.233589	0.2180
D_REN	170.0587	174.7871	0.972948	0.3311
FLOORS	11.75317	5.815977	2.020841	0.0439
NRA	0.000304	0.000216	1.406964	0.1601
NST	-2.190823	6.960387	-0.314756	0.7531
PS_5	79.00390	175.8822	0.449186	0.6535
SFMAX	-0.060938	0.034974	-1.742388	0.0821
SFMIN	0.242342	0.073499	3.297232	0.0011
TOT	5.90E-06	0.001126	0.005245	0.9958
SUBLET	-0.005487	0.001785	-3.073441	0.0022
VAC_NRA	-1469.992	530.0763	-2.773170	0.0058
D_23_28	276.3973	716.7707	0.385615	0.7000
D_24	-79.21077	578.7259	-0.136871	0.8912
D_25	43.01504	490.1794	0.087754	0.9301
D_26	-35.53089	632.2608	-0.056197	0.9552
D_27	121.0782	684.7622	0.176818	0.8597
D_30	-276.8320	246.3093	-1.123920	0.2617
D_31	-349.8781	271.2112	-1.290058	0.1977
D_32	252.0525	285.4657	0.882952	0.3777
D_33	1042.394	295.0377	3.533089	0.0005
D_34	1284.929	305.8556	4.201097	0.0000
D_35	-640.6130	366.9064	-1.745985	0.0815
D_36	1508.628	306.7588	4.917962	0.0000
D_37	690.1245	337.3972	2.045436	0.0414
D_38	550.8726	365.4172	1.507517	0.1324
D_39_40	323.6951	289.6691	1.117465	0.2644

R-squared	0.585259	Mean dependent var	4102.701
Adjusted R-squared	0.558231	S.D. dependent var	1409.003

Exhibit 4: Regression with PS_G
Dependent Variable: LSLOW
Method: Least Squares
Sample: 1 475
Included observations: 475

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5528.089	506.7284	10.90937	0.0000
AGE	-1.757821	2.740775	-0.641359	0.5216
CONTIG	0.004158	0.001913	2.173988	0.0302
D_CLS	-534.4036	106.4034	-5.022428	0.0000
D_GC	-2.692143	2.136597	-1.260014	0.2083
D_REN	166.3518	173.7841	0.957232	0.3390
FLOORS	10.82511	5.776769	1.873904	0.0616
NRA	0.000246	0.000217	1.132030	0.2582
NST	-2.987320	6.944412	-0.430176	0.6673
PS_G	-98.07646	58.54825	-1.675139	0.0946
SFMAX	-0.051638	0.034994	-1.475627	0.1408
SFMIN	0.228181	0.073036	3.124227	0.0019
TOT	8.77E-05	0.001122	0.078173	0.9377
SUBLET	-0.005516	0.001780	-3.099429	0.0021
VAC_NRA	-1479.153	528.5312	-2.798611	0.0054
D_23_28	285.1208	714.6746	0.398952	0.6901
D_24	-62.67540	576.4742	-0.108722	0.9135
D_25	60.85317	488.2718	0.124630	0.9009
D_26	-17.56618	629.5883	-0.027901	0.9778
D_27	117.1764	682.5422	0.171676	0.8638
D_30	-278.6563	245.5941	-1.134621	0.2571
D_31	-348.4267	270.3929	-1.288594	0.1982
D_32	261.7747	284.5683	0.919901	0.3581
D_33	1053.394	293.2729	3.591855	0.0004
D_34	1296.058	304.7611	4.252701	0.0000
D_35	-636.0903	365.5383	-1.740147	0.0825
D_36	1489.935	305.9041	4.870593	0.0000
D_37	696.7985	336.1598	2.072819	0.0388
D_38	533.8186	361.3445	1.477312	0.1403
D_39_40	322.0981	288.8149	1.115240	0.2653

R-squared	0.587671	Mean dependent var	4102.701
Adjusted R-squared	0.560800	S.D. dependent var	1409.003