INCENTIVE ZONING IN NEW YORK CITY:
MANAGING THE URBAN SPATIAL ENVIRONMENT,
AN INTERACTIVE AND INCREMENTAL PROCESS

by

ROMIN KOEBEL

Dipl.Ing., Technische Hochschule
Stuttgart
(1964)

M.Arch.U.D., Harvard University
(1967)

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Signature of Author . . . . . .
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Certified by . . . . . .

. . . . . Thesis Supervisor

Accepted by . . . . . .

Chairman, Departmental Committee
on Graduate Students

ABSTRACT

Title of the Thesis Incentive Zoning in New York City: Managing the Urban Spatial Environment, An Interactive and Incremental Process.

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The emergence of incentive zoning is closely linked to overcoming the detrimental effects on the spatial environment of New York City's 1916 zoning resolution. Initially, building bulk regulation, advocated by developers of early tall office buildings, was resisted on the grounds that it would create a monopoly position for such developers. Competition spurred advances in building technology allowing for ever taller buildings with superior environmental attributes at key locations, but at the cost of impairing light and air to existing buildings in an increasingly densely built-up environment.

With overbuilding and growing unrest as new values were created by destroying existing values, building bulk regulation became a priority issue. The zoning resolution was primarily a partisan and narrow response to a problem of managing the marketing of space as perceived by key private commercial interests. Its effects on the urban spatial environment are traced.

Adaptive responses to the constraints of the 1916 geometric rules fall into accommodations through modifications of building shapes within the basic envelope and innovations such as air conditioning and fluorescent lighting; and efforts to change the rule framework.

The agenda for change is dictated primarily by key developmental interests rather than by considerations of the public interest. For instance, in the 1920's vocal public opposition to the poor public environment promulgated by the code's provisions characterized by congestion in subways, on streets and sidewalks, by poor light and air, by noise and air pollution, was without avail. But, as toward the end of the 1920's, the market for space became more competitive, there was a trend toward towers on large sites utilizing the 25% tower coverage provision. To avoid rentable space further than 30 feet from a window, allowed deep space at the base was cut back above a low podium.

The acute shortage of space, the new availability of air conditioning and fluorescent lighting that reduced the need for natural light and air, interrupted the trend toward the tower in the initial post-war years. High density structures were shoehorned into small and medium sized sites. Subsequently, as tenants became more demanding, the investment building community again desired to build towers. In the early 1950's it resisted a proposed zoning change which was not conducive to the postulated freestanding tower and which reduced densities. By the end of the 1950's opportunities to build 25% coverage towers on large sites had been exhausted and basic change was seen as imperative by the investment building community.

Incentive zoning, the key to fulfilling the specifications of the investment building community, evolved out of an extended and interactive process in which investment builders were the dominant force. Bulk controls and incentive formulas ministered to their needs by increasing tower coverage to 40%, thus providing a way to exchange deep space on lower floors for more valuable space on higher floors, by providing an incentive for assemblage and high density development of large sites, and a corollary disincentive for development of small or medium sized sites where achievable densities were one fifth lower. A combination of incentive zoning formulas, bulk controls and mapping patterns was applied to overcome the negative effects of the 1916 code's envelope on residential buildings and of the rue corridor on the residential environment.

Although the 1960 comprehensive zoning amendment was primarily addressed to the then current situation in the marketing of space, it provided a framework within which changing exigencies could be more readily accommodated than under the previous code. Shifting demand situations for space offered specific opportunities to shape the urban spatial environment. As opportunities to develop large sites were availed of and demand for space continued to be strong, incentive zoning formulas were augmented and adjusted to meet the new exigencies.

The advent of special district incentive zoning in the late 1960's is attributed to new exigencies of space marketing characterized by more specialized demand situations.

The experience of Special District incentive zoning to date is reviewed and its impact on the management of the urban spatial environment assessed. The thesis concludes by discussing some possible policy alternatives.

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TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

Chapter 1

The 1916 Zoning Resolution
And the Context Within Which It Was Enacted

This chapter begins by describing the circumstances in which demands for regulating the bulks of office buildings were first raised. It then describes how the issue of building bulk regulation gradually grew to be a priority issue and how finally restrictive legislation was enacted. The chapter concludes by assessing the significance of the experience.

Until the development of geared hydraulic elevators in the 1870s, many New Yorkers believed that Wall Street would have to be abandoned as the city's financial center because of shortage of space.[1]

In 1870, the founder of the Equitable Life Insurance insisted on a 7 storey structure instead of a 5 storey structure for its new building at 120 Broadway. The building was fitted with an elevator and its architect, George B. Post, rented a suite on one of the top floors for a rental twice that of the best offices on Broadway. Subsequently he sold his lease at a profit.[2]

Numerous new elevator buildings were subsequently erected, several existing buildings were converted to elevator buildings and storeys were added. Since the conventional structure carried all its weight on masonry bearing walls, much of the prime ground level space was lost if the building was particularly tall. Chicago's 16 storey Monadnock Building

(1889 - 1891) had carried the limits of masonry bearing wall construction to their logical conclusion. Had New York's first steel frame building, a 10 storey structure on a 20 foot wide lot, been, instead, of masonry, then there would have been virtually no rentable space at ground level.

With improved elevators, still taller buildings of up to 20 storeys became possible. By 1881, plate glass, necessary for high-up windows, was being mass-produced. Electric light rapidly displaced gas illumination.[3] The telephone became available and by mid-1890, 150,000 calls a day were the average in New York.

In mid-February, 1896, the New York Times reported the filing of a spate of building plans for the erection of tall buildings:

> Several of the plans in contemplation are to be followed by immediate work...Others are gotten up doubtless in anticipation of the possible passage of the ridiculous bit of attempted legislation against tall buildings.

The Times intimated that some persons had a personal interest in having a bill passed to limit high buildings:[4]

> These persons include those who have put up tall buildings for light and air in case similar structures are built on an adjoining property. Among these are some very wealthy persons and corporations. It is to their interest that buildings as high or higher than their own should not be built alongside. Should this happen, the rental value of their property will be materially reduced.

Six weeks previously, on January 2, 1896, the New York Chamber of Commerce had taken action in favor of legislation to restrict the height of buildings in the city.[5] In noting that in Berlin, the height of buildings was limited to the width of the street, in Paris to about 50% over such width, in Chicago to 130 feet, and in Boston to two and a half times the width of the street, its Committee on Internal Trade and Improvements called for passage by the State Legislature of laws to limit the height of buildings in the city in proportion to the width of the street. Subsequently, also in January 1896, the City Club moved to secure the introduction in the State Legislature of a bill drawn up by George B. Post, a leading architect, to limit the height of buildings to no more than 15 times the square root of the width of the street in which it was located.[6] At corner locations a building could not be built along the narrower street more than 100 feet at the height permitted for the wider street. Buildings on public squares were to be excepted, but their designs were to be subject to approval by the President of the Health Department, the Superintendent of the Building Department and the Council of the Fine Arts Federation. The bill had been endorsed by the firm of McKim, Mead and White and other prominent architects.

The Chamber of Commerce based its initiative on a report by its Committee on Internal Trade and Improvements.[7] It made

the following points in its report:

- Lack of proper ventilation and sunlight would be harmful to the health of occupants of the lower floors of tall buildings and of ordinary houses in their immediate neighborhood.
- Should the number of tall buildings materially increase, "these conditions would become aggravated and the eyesight of those tenants would suffer by the compulsory use of artificial light."
- As light and ventilation deteriorated with the erection of tall buildings, owners of office buildings might use their buildings for "mercantile or manufacturing purposes," in which case the buildings safety might "become impaired by weight of merchandize or vibration of machinery."
- A tall building "situated opposite a combustible structure might be threatened in the case of fire."
- There was a lack of data and experience as to the safety of steel frame construction.
- It was difficult to render assistance in the case of fire above 150 feet.

In December 1896, the Board of Trade and Transportation Committee on High Buildings held a series of meetings to collect evidence with a view to legislative action in regard to a limit in height of buildings in the city.[8] In the course of the hearings, a number of proposals were put forward:

- One architect suggested[9] that any building higher than 100 feet should have an "unobstructed environment on all sides of 10 ft. for every additional 50 feet or part thereof above the 100 foot level." However, a new building might be erected against and to the full height of an existing building, with a dead party wall, provided the conditions were met on the remaining boundaries. "In no event should any structure be erected to greater height above the curb than five times its narrowest facade."
- The Chief of the Fire Department[10] in questioning the non-combustibility of "fire-proof" buildings that had been built to a height of 300 ft., recommended that office buildings should not exceed 12 storeys in height, and not be on streets less than 70 ft. wide.
- Under another plan, a street 35 feet wide might have buildings 8 storeys high, a 60 foot street ten to eleven storeys, and a 80 foot street fourteen storeys. The limitation on Broadway would be thirteen storeys.

Superintendent of Buildings Stevenson Constable believed in limiting the height of a building to 175 feet or 200 feet at the most.[11]

The President of the Health Board said high buildings restricted sunlight, "the most efficient sanitary agent known. They make it necessary to use artificial light, and if gas light

is used, the air is vitiated by the products of combustion."[12]

The representative for the Otis Elevator Company, in stating that "in the future he thought there would be something in the nature of a menace to New York's supremacy as a commercial center if people are denied from concentrating these business centers in some part of the city," suggested that in a city like New York, limited by natural barriers in its financial and commercial centers, there might well be set apart a portion of it in which these high structures could be erected."[13]

In representing real estate interests, a Mr. Levy took issue with the views expressed by Chief Bonner of the Fire Department and the President of the Board of Health:[14]

- In claiming that "a conspiracy in the interest of certain tall buildings had existed for the prevention of other high structures in this city," he called on the Fire Chief to resign:

> Chief Bonner, an official of the city, has made a statement here, after which I do not think he should remain as an official. His action is either through ignorance, or it is done with a purpose. He knows that since we have had tall buildings in New York there was less fire and he knows that every first class high building has its own fire department.

- In stating that the gentlemen of the Board of Health were paid to benefit the city and not to ruin it, he said:

> They know that the statement of every physician of prominence in New York is that the people have better health and more air space than before in these first class buildings.

High buildings had improved the value of property and increased the city income, he said. "There was no prettier effect anywhere than around City Hall Park, where these buildings are. Everybody coming here admired them."

Although the Superintendent of Buildings suggested that the Board of Trade and Transportation should recommend "a single short bill to the legislature limiting the height of buildings," no affirmative action on the question of limiting heights of buildings was taken for more than a decade and a half.

Tall buildings continued to be erected, and by the turn of the century there were numerous 20 storey tall skyscrapers in Manhattan's financial district. The first towers were located in Lower Manhattan not only because of the great demand for space, but also because elevator speeds could only be satisfactorily controlled with motors operated by direct current, available only in Lower Manhattan.

With tall buildings clustered closely together along narrow streets, even high-up light and air were impaired. The invention of the direct gearless electric elevator and the availability of Caisson-type foundations made it suddenly possible to substantially increase the height of office buildings.[15] In this manner, once again access to light and air could be achieved by erecting yet taller structures.

The Singer Building, completed in 1908,[16] located on Lower Broadway at the corner of Liberty Street on a 24,000 sq.ft.

lot, rose 47 storeys to a height of 612 feet. Although the building had 110 feet of frontage on Broadway and 220 feet on Liberty Street, the tower portion of the building was quite slender, only 70 feet square. In other words it covered only approximately 25% of the site.

By pulling the tower portion back towards the center of the site Ernest Flagg, the building's architect, had sought to secure a degree of permanency of light and air for the tower floors, even though this meant a less than optimal ratio between the core portion of the tower floor and its usable rentable area. In part this was also offset by the advertising value that the Singer Sewing Machine Company could derive from the tower. For 18 months it was to be New York's tallest office building. But in 1909, the Metropolitan Life Insurance Company built a 50 storey tower 700 feet tall.[17] It was located at Madison Square to the north of the financial district.

On April 24, 1913, several blocks to the north of the Singer Building, the Woolworth Building was opened. Facing City Hall Park, it was to remain at 742 feet the tallest office building until the 1920's.

Louis Horowitz, President of the Thompson-Starett Co., the contracting firm that built the tower, told Mr. Woolworth[18] that he thought the project a poor investment because he did not think Woolworth could get enough rent from the tenants to pay a profitable return on an investment of seven or eight million dollars. But Mr. Woolworth said the Woolworth Building

was going to be like a giant signboard to advertise around the world a spreading chain of 5 and 10¢ stores. Such an enormous hidden profit would outweigh any loss, he told Horowitz.

By 1913, the overproduction of office building skyscrapers in Lower Manhattan had led to a deterioration of the rental situation.[19] There had been a slight improvement in spring and summer of 1912 following two poor preceding years of 1910 and 1911. Coincident with the deteriorating rental situation, plans were announced for four major new office buildings, one on Broadway south of Rector Street and two on Broad Street. But the greatest threat was posed by Coleman du Pont's proposal to erect the world's biggest office building at 120 Broadway, on the site of the old Equitable Building that had burned down in 1912.[20] In an effort to stop the building, owners of the adjacent properties implored Louis Horowitz,[21] whose Thompson-Starett Co., was to erect the building, to use his influence with General du Pont to stop the project. The opposition was led by George T. Mortimer, vice-president of the United States Realty Company, which owned two tall buildings across the street from 120 Broadway.

> "Look," said one of the committee that visited Horowitz, "you have influence with General du Pont, and you can stop this job...you use your influence and you can get him to complete the purchase of the land and dedicate this block for a park. Such a place would make a lovely breathing spot that would brighten the lives of those who work in this congested region."[22]

But Horowitz thought the proposition preposterous. "Oh," said one of the callers, "it's not preposterous; the city needs a park down here and this block is just the thing." Horowitz would only agree to urge du Pont to abandon the project on the condition that the plot be bought at cost by the adjacent property owners and dedicated as a park. "That stopped all chatter; nothing more was said about a park," Horowitz recalled.

An alternate proposal for the owners of existing neighboring office buildings to co-operate in building a low building on the site with the upper storeys set well back did not materialize. Such a building would have protected the light of the adjoining properties, and "left undisturbed the rental conditions in buildings for blocks in all directions."[23]

Each new office building, typically built vertically from its lot lines, meant in addition to the increased amount of space the darkening of buildings already erected nearby; and as light and air then commanded higher rentals than location, the effect was viewed with apprehension.

In the case of the new 36 storey Equitable Building, location as well as (unobstructed) light and air would be secured above approximately the 18th floor. With the new 1,200,000 million square foot structure rising on all four sides without setback for 36 storeys, the following consequences were anticipated for existing space facing the Equitable block:

- Curtailment of light and air;
- As a result, drastic drops in rent per sq. foot per annum;
- loss of tenants to the new environmentally superior space of the adjacent structure.

Moreover, the vacancy rate in the whole surrounding area would increase as tenants relocated to the new building.

Loss of tenants and concomitant loss of rents could not be compensated for by curtailment of operating expenses through cutting elevator service and maintenance costs, if the remaining tenants were to be held. Horowitz, in citing the depression and the competition with the Woolworth Building, the City Investment Building along with several others, said for a while the 1,200,000 square feet seemed "almost like a new continent, so vast and vacant were its many floors."[24] It was not until the outbreak of WWI when J. P. Morgan and Co. rented a floor in connection with their activities as buyers of munitions for the allies that the vacancies started to decline.

On February 27, 1913, coincident with this low point in the rental situation, Manhattan Borough President George McAneny, in finding that there was:[25]

> ...a growing sentiment in the community that the time has come when an effort should be made to regulate the height, size and arrangement of buildings...in order to arrest the seriously increasing evil of the shutting off of light and air...to prevent congestion and to reduce the hazards of fire, presented a resolution to the Board of Estimate, calling for the appointment of a Committee on City Planning,

- to study existing conditions,
- to find whether height, size and arrangement of buildings should be regulated,
- to study the legality of such regulations and whether for the purposes of such regulations, the City might be divided into districts or zones.

The Committee was to submit in advance of a general report recommendations on limiting the height of buildings on Fifth Avenue. The Committee was empowered to appoint an advisory commission representing real estate interests, the architectural and engineering professions. The resolution was adopted.

On March 29, 1913, at a luncheon of the Club, Borough President McAneny predicted that the time was coming when there would be no more skyscrapers built in the city, and when that type of architecture would be regarded as a curiosity.[26]

Dr. Werner Hegeman, a German city planner, contrasted the freestanding tower of the Metropolitan Life Insurance Building at 23rd Street and Madison Avenue with the "horrible" skyscrapers of Lower Manhattan.[27] "Give us towers, make them as high as the Metropolitan if you wish, and you will have clean and healthy conditions,"[28] he urged.

Within days Ernest Flagg, the architect of the Singer Building diagonally across from 120 Broadway, in taking issue

with McAneny said it was too late to get rid of skyscrapers.[29] Instead, he proposed:

- establishing a general height limit at once the width of the street;
- allowing a building to any desired height on a certain percentage of each plot, say 25 to 30%;
- setting back the tower portion from the front lot line so as not to darken the street;
- allowing owners to transfer their right to build high to adjacent plots (..."this would be a valuable privilege and would serve to compensate one for any damage the increased size of the building might occasion him.")

Flagg did not object to tall buildings: "standing singly and isolated, there is little to be said against high buildings..." but he considered it desirable that "the main cornice line of the street facade be restored to some degree of order," an objective that could be achieved under the proposal.

Just days later, Flagg's theme was expanded upon.[30] The following proposals were made:

- A limit should be set to the number of skyscrapers to be allowed in the future,
- skyscrapers should be built at considerable distances from each other,

- their boundary walls should slope inward, from groundline to top, "so as not to deprive adjoining buildings of their fair share of necessary sunlight and ventilation."

Moving swiftly, the Committee on City Planning had by mid-April 1913 completed its appointments to the Advisory Commission.[31] Of the initial nineteen commission members there were more realtors than men from any other calling. Among them was George T. Mortimer of the United States Realty Company, owners of two major buildings vis-a-vis 120 Broadway. Flagg was not included. Toll notes that there were only two groups involved:[32]

- The private commercial interest and the reformer-planners.

Only the private commercial interest, the group with a stake in the ownership of the property which might be affected, had its hands on the levers of municipal power, he writes.

The reformer-planners, however, were essentially in sympathy with the objectives of the owners: "Their pioneering work turned out to be an exercise in drafting the will of a handful of New York property holders."

The Fifth Avenue Association which had been founded in 1907 to meet the problem posed by the encroachment of lofts on Fifth Avenue noted in its annual report released in Spring 1913 that it was largely as a result of the Association's agitation that Borough President McAneny had proposed to the Board of Estimate a limitation of the height of new buildings in Fifth Avenue and 100 feet east and west of it to not more than 125 feet.[33]

The Association, in endorsing the proposed legislation, took the opportunity to call attention to the fact in its annual report that in its May meeting of 1912 it had adopted a resolution urging that the restrictive belt on each side of the Avenue be extended from 100 feet to 300 feet.

Robert Grier Cooke, President of the Fifth Avenue association, in answering the question[34] how "the mere cutting down of the height of buildings to 125 feet" would "rid the section of the crowds of garment workers and other factory hands," explained that it was hoped and expected that the new regulations proposed by the State Factory Commission, making it obligatory on builders:

- to provide more and wider staircases,
- to greatly reduce the number of operatives in a room,
- to provide more light, better ventilation and improved hygienic conditions,

would "work together with the laws compelling a reasonable height of buildings so as to make it impossible for factories to exist in the heart of New York's best shopping section."

In 1911, George McAneny had, at the request of the leadership of the Fifth Avenue Association, appointed a quasi-official Fifth Avenue Commission, all of whom were members of the Fifth Avenue Association, except the Chief Engineer of the Board of Estimate. The Commission was to study the problem and make recommendations that McAneny was to sponsor before the Board of Estimate.

In July 1913, Arnold Brunner, chairman of the Fifth Avenue Commission, wrote E. M. Basset, chairman of the Advisory Commission, that his commission was considering the question of the height of buildings,[35] principally from the point of view of the street itself, rather than from the point of view of the effect of high buildings upon their opposite neighbors. "We believe that a limitation of the height of the abutting buildings would prevent Fifth Avenue from becoming a canyon." In selecting the Rue de la Paix in Paris as a model for a successful shopping street, the Commission reiterated its view that a maximum cornice height of 125 ft. would be desirable, with an allowance of two extra storeys in the mansard.

On December 4, 1913, the Advisory Commission of the Board of Estimate's Heights of Buildings Committee filed its report.[36] The report recommended:

- limitation of building height at the street line to twice the width of the street with a minimum of 100 feet and a maximum of 300 feet;
- setting the street walls above such limit back one foot for each four feet of increased height;
- allowing a tower to be erected to any height provided it did not cover more than 25% of the lot and provided every part of the tower was kept at least 20 feet from the lot and street lines. In the case of a building facing a public park or waterfront, however, such tower might be placed at the building line;

- coverage of the entire lot up to the top of the first strey, above which 10% of every interior lot was to be left vacant at the rear. In the case of a corner lot, no rear court was to be required;
- further decrease in coverage by 1% of the lot area for each storey, except the first;
- minimum dimensions proportionate to height for main courts other than the 10% rear court of not less than 6 feet and not less than the number of feet equal to one and one-quarter times the number of storeys above the first storey.

The Advisory Commission estimated that given anticipated plot sizes, buildings would reach their "economic height" when, through the application of the court and set-back regulations, the area of the building had been reduced to about 60% of the plot. This would mean, the Commission projected,

- for buildings on an interior plot on a 60 foot street a height of about 14 to 17 storeys,
- for corner plots on a 100 foot street, a probable height of between 16 to 20 storeys.

The recommendations would have had widely varying impacts on the Woolworth Building and the Equitable Building, two key representative buildings. The setback of the Woolworth Building would have been at the 23rd floor rather than at the 27th, but greater tower coverage would have been allowed, and no limit would

have been set to its height. The Equitable Building, on the other hand, would have been severely impacted. Instead of rising vertically from the lot line for forty storeys, it would have been interrupted by two setbacks and its upper half would have been squeezed into a tower.

Ernest Flagg took a critical view of the proposals.[37] After listing the disadvantages of tall buildings, the chief causes of complaint against high buildings, he asked:

- "Can any one point to a single disadvantage of high buildings, which would be overcome by the adoption of that plan?"

Then he asked which positive features of high buildings could be retained by the adoption of the plan? The implication was that there were none.

In February 1914, enabling legislation was enacted by the state lesiglature in Albany to empower the Board of Estimate to regulate the heights and uses of buildings.

In May 1914, hearings were held on the subject of establishing a Second Commission to recommend the "boundaries of districts and appropriate regulations to be endorsed therein."[38]

At the first hearing some opposition was registered:

- Robert F. Dowling, in stating that he was interested in three of the skyscrapers, said he didn't believe "for that reason that the city authorities should stop anybody from erecting a building as big or bigger than any other if they see fit."[39]

- Another speaker said:

> To me, the American skyscraper is the embodiment of a great industrial progress, and has made the cities what they are. You can't stop this without reversing the wheels of progress and no man ever did that. We have a city that is the wonder of the world and its biggest wonder is the high building.[40]

However, at the second hearing on May 22, 1914, supporters completely dominated the proceedings and the Board of Estimate voted unanimously to appoint a "Commission on Building Districts and Restrictions."[41] On June 26, 1914, little over a month later, the Second Commission was appointed. Veiller, the housing reformer, was dropped. The position of private commercial interests was strengthened.[42]

The Commission held its first round of hearings in January, 1915. Charles F. Noyes, a real estate broker representing many realty owners in the downtown insurance district, argued that with the two times height limitation, buildings on narrow downtown streets 40 to 60 feet wide would be limited to 8 or 9 storeys.[43] In order to avoid confiscating values, he suggested that where, before enactment, property had sold or was valued at $50 per sq. ft. or $125,000 a lot (25 ft x 100 ft), a building 150 feet might be erected or if the value was $75 per sq. ft. a building 200 feet high might be erected.

One speaker observed that the ordinance would give a monopoly of the air to those already in possession of skyscrapers.[44]

The representative of the Allied Real Estate Interests, who was also a member of the Commission, said that the only fault he had to find was that the limit for buildings was not sufficiently low, the height regulations would actually allow some of the city's skyscrapers to mount still higher.

Ernest Flagg said the ordinance "would not do what many of its advocates expected it to do, namely limit height and area of buildings to check the evils which our present methods of building are causing."[45]

> "The Heights of Building Commission was appointed to study the situation and suggest a remedy. Now, we have the proposed remedy, and lo! It is a regulation to permit the erection of the very kind of buildings which are causing the mischief."

Representatives of real estate interests, architects, tax-payers' associations, the Fire Underwriters, the Lawyers Title Guarantee Company and the Factory Investigating Committee spoke in favor of the plan.[46] The work of the commission continued. Early 1916, in a series of luncheon meetings held at the rooms of the Merchants Association, members of the commission explained their work.[47] Particularly staunch support came from key mortgage and insurance companies:

- The President of the Lawyers Title and Trust Co., noted that in lending money it was exceedingly difficult to guess how long any section would remain stable.
- The President of the Title Guarantee and Trust Company said there had been "too much doing as the individual owner pleases,"

- The President of the Lawyer's Mortgage Company said that very likely the speculative builder might be the only opposer.

On March 8, 1916, two days before the Commission delivered its tentative report to the Board of Estimate, fifty three financial institutions had signed a supporting statement after Basset had spoken at a conference organized by the Advisory Council of Real Estate Interests.[48]

On March 10, 1916, the report was submitted and hearings scheduled for March and April.[49]

Under the proposed zoning law, the city was divided into use, height and area districts.

In most of Manhattan, the height of the allowed street wall, i.e. the cornice line, was set at twice the width of the street, as had been originally proposed by the first Commission. There was, however, one significant exception. In the office and financial section of Lower Manhattan the permitted height had been increased to two and one half times the street width. According to Basset the two and one half times and two times districts were created because those districts were partly built up with skyscrapers of great height and it appeared discriminatory to impose a lower height limit on the rest of the same area.

Above the street wall, the building might be carried higher provided it did not penetrate a prescribed sky exposure plane. No rule against skyscrapers was proposed. Provided the plot was large enough, an owner could go up as high as he saw fit on 25% of the plot.

At the hearing on March 27, 1916, Manhattan Borough President Marks said that tragedies in real estate could have been averted if the city had followed some such plan as was proposed and that tragedies will be averted if plans went through.[50]

Robert Anderson Pope, a landscape architect, raised a number of objections:[51]

- There was no evidence that the health of the citizens had been affected by high buildings;
- the proposed height restrictions were arbitrary, unscientific and uneconomic;
- the time was coming when all traffic in Wall Street and the financial district would be pedestrian;
- unless the commission had anticipated the economic development of the city, the proposed regulations might prove very detrimental.

Another speaker opposed the restricting of the heights of buildings on the grounds that the courts would hold such a law to be discriminatory and unjust. There should be one limitation to building over the entire city, he said. "In Staten Island,

for instance?" enquired Chairman Basset. "All over the city," was the reply.

The Fifth Avenue Association urged a reduction in building height to one and one half times the width of the Avenue (later 1¼).[52]

At a subsequent hearing[53] Park Commissioner Cabot Ward said the plan accomplished nothing toward restricting buildings adjacent to parks and that it jeopardized the small park, which was a center in the life of the neighboring community. The representative of the Women's Municipal League urged that buildings on Columbus Circle be restricted in height so as not to spoil the skyline of Central Park.[54]

Another speaker, a builder, said "the craze for apartment houses was greatly overestimated" and urged the setting aside of a section of the West Side for private houses.[55]

The Commission submitted its final report to the Board of Estimate on June 2, 1916. The final round of hearings was scheduled to begin on June 19, 1916. There was still considerable opposition. One owner claimed that a building zone system would benefit only the minority "as to limit in any considerable degree the height of buildings is to create a monopolistic value in favor of existing buildings."

George T. Mortimer, a member of the Commission, stressed that one of the important underlying factors behind the whole zoning proposition was the stabilizing of real estate values.[56]

It will be remembered that Mortimer, as Vice-President of the United States Realty Co., had led the opposition to the Equitable Building. Subsequently, when Horowitz resigned as president of the Equitable Office Building Corporation, Mortimer became its manager. Mortimer's insightful and revealing observation drew an irate response from one owner,[57] who, in referring to Mortimer's interest in the Equitable Building, said that Mortimer, in order to be consistent, ought to request the Board of Estimate to reduce the height of the Equitable Building to about 20 storeys, and the heights of all similar structures, which were detrimental to their neighbors or to the community at large. This should be done without compensation under the police power that Mortimer claimed for the city.

On June 20, 1916, timed to coincide with the opening of the hearings, the New York Times published an editorial entitled "New York City's Final Form," in which high hopes were pinned on the enactment of the resolution. "We shall not see again such wholesale making of new values by the ruin of old values."

One final hearing was held on July 5, at the conclusion of which the Zoning Resolution was adopted by a vote of 19 to 1.

Although ostensibly aimed at providing an adequate spatial environment for all areas, the 1916 Zoning Resolution did not succeed in achieving this objective. In large part the failure is attributable to the fact that a solution that was devised to solve the specialized problems of two specific and highly confined

areas was applied on an area-wide basis. It was applied in areas in which the problems that had initiated the search for the initial solutions had not been experienced. Such application was to create further serious problems.

The model of the environment embraced by the Fifth Avenue Association was one of a rue corridor with a low street wall, of uniform height. This model was primarily adopted, in conjunction with other measures, as a means to prevent encroachment by loft buildings. Only in second instance was it thought of as a measure to enhance such environmental attributes as light and air. Nevertheless, the model was valid and had it been subsequently applied in those areas yet to undergo development, as it had been formulated for Fifth Avenue, it would have largely prevented negative environmental impacts such as were to be caused by the application of the 1916 rules.

In lower Manhattan, the problem was different from that of Fifth Avenue. Here the problem was ostensibly to stop high-coverage, high-density buildings, rising vertically without set back from their lot lines, at prime locations.

The problem of the financial district was met by modifying and applying elements of the "rue corridor" model to that area. Whereas along Fifth Avenue buildings were restricted to a cornice height of one and one quarter times the width of the street, in the financial district the allowed cornice height was twice that. Above this height buildings could rise at a steep set back angle.

This shape prevented straight-up office buildings rising vertically from their lot lines to unlimited heights, such as the Equitable Building.

The rules ensured that light and air of major straight-up buildings completed prior to introduction of the rules would be protected against encroachment by new straight-up buildings rising in the vicinity, assuring superior competitive positions for structures such as the Equitable Building.

The avowed rationale of the geometric rules may be summed up as follows:

> Nobody should be allowed to build space within an area that was significantly better than anybody else's or significantly better than anyone else could build.

Whereas the rules may have been suited to serve certain limited objectives in the already highly developed financial section for which they had been devised, they were not suited for those large areas yet to undergo intensive redevelopment. It is a general rule, however, that immediate pressing problems take priority in the decision making process. Consequently, the impacts of wider application of the solution, worked out to meet the needs of a highly confined area, were of only limited concern to the framers of the Zoning Resolution.

Indeed, for both classes of interests, namely the group that through the Zoning Resolution would secure a monopoly on desirable environmental attributes, and the group impacted by

Equitable type structures, there was nothing to be gained by advocating rules that would secure superior environmental attributes in areas yet to undergo redevelopment elsewhere.

While the Fifth Avenue Association, in propagating its "rue corridor" model, demanded that a canyon-like environment be avoided, it was the canyon that, in fact, was legislated in most areas to experience intensive redevelopment subsequently. These areas were mapped as two times height districts, the median value between the one-and-one half times height district of Fifth Avenue and two-and-one-half times height district of the Financial District.

By virtue of the wide streets and avenues, buildings in the two times districts could achieve comparable heights to those of the two-and-one-half times district. Given lot depths of only 100 feet in such areas to undergo redevelopment, light and air deficiencies were exacerbated through the corollary narrow rear yards. Whereas tall tower-like buildings had unimpeded access to light and air, the typical product of the 1916 geometric rules received its daylight over the tops of wide and high buildings on the opposite side of the street, or worse still on the opposite side of a narrow rear yard.
High coverage, in conjunction with buildings reaching from side lot line to side lot line, leading to deep space, further worsened environmental attributes.

From the outset, then, it was understood that new areas of intensive development would experience a serious environmental handicap through application of the geometric rules.

With increasing motorization, noise and air pollution was to become increasingly critical. Many of the problems resulting from the adopted model of the three-dimensional environment could have been avoided had, instead, the alternate model as proposed by Flagg been adopted. His model had envisaged towers covering 25% of the lot, rising from above a building base built to the lot lines, but only as high as the street was wide. Although many of the geometric rules deficiencies had been recognized at their inception, they survived basically unchanged until 1960. The geometric rules were enduring in part because, once set, they conferred predictability.

Curbing overbuilding had become by 1913 a priority issue. The process leading to the 1916 zoning resolution was an interactive one. The process illustrates the importance of timing. Various classes of interests can be affected in different ways by the same set of rules depending on the timing of the introduction.

In the financial district the geometric rules primarily served limited private commercial interests by enhancing a monopoly situation. Imposed earlier, the same rules could have prevented limited private commercial interests from exerting that monopoly situation.

As the question of limiting heights became a priority issue, the intent of such proposed legislation became endangered as major entrpreneurial opportunities began to be perceived by certain interests, to get in under the wire with significant amounts of space with superior environmental attributes at key locations in economically constructed straight-up buildings. Such structures could take advantage of a monopoly situation because, given the typically limited parcel sizes in the financial district and the 25% coverage limitation for towers, higher buildings could neither encroach on their environmental attributes, nor could new buildings provide similar superior environmental attributes once the Resolution was enacted. This in itself might be the prime motivating incentive behind the efforts of key interest groups to secure more restrictive legislation. This may conflict with the interests of those groups that may have contributed to making the question of rule introduction a priority issue.

Once imposition of restrictive legislation has become a priority issue, the timing of its introduction becomes the critical variable. Manipulation of the time span between inception and enactment may determine whether avowed objectives will be achieved or whether unavowed, underlying objectives, objectives that may be contradictory to the avowed objectives, will be furthered by the rule introduction.

Chapter 2

The Skyscraper Era - Effects of the Zoning Resolution on the Spatial Environment

This chapter will examine the impact of the 1916 Resolution on the spatial environment. It will show how various adaptive responses were tested to overcome the resolution's negative effects on the quality of the spatial environment.

Although the zoning resolution permitted 25% of the lot to be built to any height, little use was made of this provision in the early years for the following reasons. Light and air considerations made it less feasible to build structures with deep space. Consequently, office buildings could only be built on moderately sized lots. Such lots were not large enough to support a tower with 25% coverage. Superimposed on a moderately sized bulk envelope, such towers would have been, of necessity, too spindly. When the necessary elevator and stair space had been deducted, the remainder would have been insufficient to warrant the cost of such towers. Nevertheless, a few were built, e.g. the Heckscher Building. Their principal value was seen as an advertisement.

In that towers were discouraged, the bulk envelope regulations worked, as had been intended and anticipated by the Advisory Commission -- at least for the first years -- as an indirect density control.

The Zoning Resolution had little effect on Lower Manhattan, where streets had already largely been built up to their maximum capacity.

It soon became evident that the Zoning Resolution was more easily applied to some types of buildings than to others.[1] Office buildings, in which it was possible to rent not only small sections, but also to a certain degree, artificially lit areas, could afford to utilize the zoning envelope to a greater degree than could hotels and apartment houses, which found it difficult to secure sufficient light for the interior portions of the building if these were built to the front lotline.

In the case of the Shelton Hotel on Lexington Avenue,[2] the problem was met by building only the two lowest storeys and the flanking towers to the building line. By setting the central tower portion back, it was possible to secure adequate daylight and ventilation for a greater percentage of the hotel rooms than would have been possible had the allowed envelope been filled to the maximum.

By 1924, there was yet to be a street with an uniform cornice line, a trend encouraged by the law.[3] Little change of the spatial environment was registered in Lower Manhattan, where the streets had already, to a considerable extent, been built up to their maximum capacity. Further uptown, however, at 42nd Street, Madison Avenue and Park Avenue, the effect of the law on

the streetscape was becoming increasingly more visible.[4] Street walls with uniform cornice lines gradually emerged, as construction in midtown's two times height districts progressed.

In 1924, Ernest Flagg, in expressing his concern at the quality of the environment resulting from adherence to the bulk rules of the 1916 Zoning Resolution in those areas of midtown undergoing rapid redevelopment, once again called for limitation of the general building height to once the width of the street.[5] He revived his earlier proposal to allow transfering tower development rights to adjacent parcels and expanded it to allow for transfers of tower development rights between any owner on the same block.

At the time and in the ensuing period, still little use was made of the 25% coverage provision to build towers penetrating the prescribed bulk envelope. Where it was availed of, the tower portion contributed an only insignificant percentage to a building's total rentable space. Consequently, towers were not yet a factor in increasing an area's density.

In midtown Manhattan, most of which was mapped as a two times height district, with its wide streets and avenues -- much wider than those of Lower Manhattan -- buildings on avenues were reaching heights of 15 storeys and 9 storeys on side streets.

200 foot wide blocks were typically developed solidly along

the front lot lines, in a "hollow square" fashion. With rear courts on the typically 100 foot deep lots, only ten feet deep, the quality of the environment of these developments with respect to light, air, exposure and ventilation was poor.

By 1926, the question of subway congestion was quickly becoming a priority issue. Subway congestion was directly attributed to the many new skyscrapers. In 1926, a Mayor's Committee on City Planning and Survey was established. One of its members was Henry H. Curran, Counsel of the City Club. On June 16, 1926, Curran said that as a member of the committee, he would press for:[6]

- a reduction of building heights on avenues from 15 storeys to 10 storeys, and on side streets from 9 storeys to 6 storeys;
- abolition of the set-back privilege by which skyscrapers were permitted to ascend in steps.

"Unless this were done, the subway problem was incurable," he said in observing that "the more subways the city built, the more skyscrapers were built to monopolize the new capacity."

- "If the skyscrapers did not cluster along the spine of Manhattan, as they do, we should not need the underground spinal cord of subways to minister to the needs of the skyscraper monsters." He concluded, "We have reached the limit of municipal stupidity, the skyscraper must go."

Thomas Adams, General Director of the Regional Plan of New York, asked what will happen to Manhattan when the number of skyscrapers is multiplied by 10 or 20?[7] "Continue to erect skyscrapers and fill them with more people and it means more trucks, more automobiles, more movement, and the condition becomes a hazard to life and health," he said.

While agreeing with Mr. Curran "in principle," namely that some restrictions should be placed upon the building of new skyscrapers, he warned against setting an arbitrary limit to the height of building. Rather, he urged that heights should be studied in connection with the whole problem of uses and street spaces. "Skyscrapers are not any more objectionable than low buildings, provided they have around them sufficient space." Such a skyscraper could be beautiful, he continued. However, a series of them, packed side by side, was "neither beautiful nor healthful. The air deteriorates; artificial lighting becomes the rule."

In quoting Ruskin, who said of Edinburgh that its buildings were well displayed, Adams said the Metropolitan Life Insurance Building owed its beauty to the space of Madison Square; the Telephone Building, a recent office building, to the background of the North River (Hudson), the Shelton Building to the vista of Lexington Avenue.

But in September 1926, E. M. Bassett in expressing his doubt that more restrictive height limitations could be imposed in the Central Business District because this would be discriminating, called attention to the percentages of the various height districts in relation to the entire city: 2½ times 0.5; 2 times 4; 1½ times 9.6; 1¼ times 12.4; 1 time 63.5.[8] This schedule, he said, given such inalterability of districts of great allowable heights to lesser heights, showed that nearly the same thing could be accomplished if Boards of Estimate rigorously refused to increase the area of existing intensive districts. Such refusal would be equitable to owners.

The argument of landowners that height limits should be raised, because land values had increased, was a false one, he asserted:

> Land values will take of themselves if owners become convinced that Boards of Estimate will not increase the height limits. If, however, such boards supinely increase the height limits, congestion of living and working conditions will surely increase, along with street congestion and sooner or later, it will be demonstrated that the city was unable to save itself.

In November, 1926, the inventor, Thomas Edison, expressed the belief that the building of skyscrapers in congested parts of New York and other cities would have to be prohibited to avoid traffic strangulation.[9] He predicted disaster, if the construction of buildings each housing the population of a small city were continued.

Thomas Adams, in agreeing with Edison that traffic was becoming more difficult as a result of skyscrapers, said in his opinion what counted was not the restriction of skyscrapers, but their reduction in height.[10] "Furthermore, there must be more street space around high buildings."

Adams, in advocating limiting heights of buildings to street widths, said this would not do away with skyscrapers because: "Many of our avenues are so wide that very tall buildings could be constructed on the basis of street widths," while still higher buildings might be built on plots facing public parks and squares. Adams remarks show that penetration of the sky-exposure plane by means of 25% coverage towers was still not seen as a critical factor in the question of densities. And, again, at the end of November 1926, the indefatigable Flagg offered his proposal that tower development rights be traded within a block. Since 1924 he had, however, become convinced that a general height of once the width of the street was impracticable. It should not be above five storeys at most, he said.

By this time, some of the zoning resolutions had become increasingly apparent to have negative effects on built form:

- A lopsided distortion of the Babylonian ziggurat became the trademark of the New York Office building;
- the restriction to 25% of the lot made towers so spindly they were hardly worth building;

- coverage of non-tower portions of buildings was still extreme.

In consequence, much poor space was built. The usual arrangement was to have private offices along the windows. Reception and clerical work space was located in the secondary area next to the corridors towards the interior of the building. Such space was difficult to light and ventilate.

In offices deeper than 25 feet, artificial light had to be used to supplement "borrowed" daylight. With electricity still quite expensive, many tenants used as little as possible. Lighting technology was poor. Electric light as installed in most offices provided 4 - 6 foot candles of lighting, as opposed to today's lighting standards of 50 to 100 foot candles. Moreover, artificial light in generating significant amounts of heat exacerbated the ventilation of deep space.

Rents rapidly decreased with increasing building depths. Shallow space commanded comparatively much higher rentals. An indication of the relationships between rental values and various depths is given by the following table.[11] Although it reflects 1923 rent levels, the message is clear.

Distance from Window	Rent per sq. ft.
15	3.00
20	2.80
25	2.60
30	2.40
35	2.15
40	1.95
45	1.80
50	1.65

In the late 1920's, in Manhattan's financial district in the vicinity of the Stock Exchange, space 50 to 60 feet from the nearest window rented at $3.50 a sq. foot per year as opposed to $5 to $8 for space closer to windows. By the end of the 1920's, space over 25 to 30 feet from a window would, if at all rentable, command a rental rate of only a third to a quarter of the rate that was obtainable for shallower space.

An examination of a typical office building in which

- 80% of the excess depth over 25 ft. was in the lower half, and
- 66% in the lowest third, revealed that
- although 49% of the total office space was in the building's lower third, that portion of the building earned only just over 35% of the building's income;
- whereas the top one sixth of the building containing 6.84% of the total net area earned approximately 8% of the total revenue;
- in the sixth of the building just above the half-way mark, the percentage of income was balanced by the percentage of the total area.[12]

George Ford concluded from this data that the bulky lower storeys of the typical skyscraper were much too heavy to row their own weight, were a drag on the building, and tended markedly to cut down the net return on the equity for the whole project.

Since the construction and operating costs per square foot would be about the same for both the deep and the shallow parts of the building, an increasing advantage was seen in shallow buildings. How was the problem met? The difficulties generated a number of adaptive responses within the constraints of the Zoning Resolution.

In the case of the Empire State Building, initial plans had been to provide a significant amount of deep space in lower parts of the building.[13] When it was found that here, too, space close to windows might bring $3 to $4 per sq. ft. while poorly lit space further back would not bring over $1 to $1.50, it was decided to cut cubage in the lower parts of the building by generously setting back above the fifth floor. Above this level rose a tower, taking advantage of the 25% lot coverage sky-exposure plane penetration privileges. Stores, banks, and insurance offices were expected to take the first, second and third floors, while bank clerical help would probably absorb the fourth and fifth.

George Ford point out in 1930 that it might well be a good strategy to bring tower portions of buildings down to as low as the top of the second or third floors, unless there was an obvious market for the first four or five storeys for department stores, speciality shops, banks, brokers offices and insurance offices, with their work rooms directly over their sales rooms and their public rooms.[14]

The evolution of the plans for the Rockefeller Center sheds light on the shifts in the type of space in demand. In December 1928, the Metropolitan Square Corporation was formed to develop the three block sites between 5th and 6th Avenues, 48th and 51st Street property owned by Columbia University.[15] Originally conceived around a planned new home for the Metropolitan Opera, initial schemes had envisioned:

- large stepbacked skyscrapers arranged around a centrally located plaza to be donated by John D. Rockefeller,
- an Opera House, facing the plaza on the west side of the middle block,
- the skyscrapers to the east of the plaza, rising from the Fifth Avenue lot line, in order to maximize avenue retail frontage continuity and office space with avenue location.

Under the plan, view of the plaza from the Avenue would have been blocked. Although the site was a three block superblock, no advantage was taken of the possibility to provide a substantial amount of space in tower-like structures.

When the Opera withdrew from the project because its centrally located site was too costly, drastic alterations were made to the site plan. It became possible to relocate the major office building to the middle of the center block and locate low buildings on Fifth Avenue. The shift away from the originally contemplated ziggurat building shapes with their deep floors to the open plan layout of slender towers rising

from ground level reflected the increasing demand for light, air, exposure, view, quiet, improved ventilation, removal from air pollution of street traffic. The towers were spaced far apart, because the managers knew that a few big towers with plenty of light and air would rent better than many small ones. The RCA building, the central building, stepped its side back from the east end to avoid building unprofitable deep space as the elevator banks dropped off with height. Said Manager John R. Todd:[16] "I have never collected an extra dollar of rent for space more than thirty feet from a window." As a result, the group of big office towers -- the smallest 8,200 sq. ft., the largest 17,000 sq. ft. net -- was surrounded by less than 25% of the additional lower floor cubage permitted by the zoning envelope. This space was largely used for stores, theaters, garages, or radio studios, soundproofed and without windows. Still, the restriction to 25% lot coverage made towers so spindly that it was uneconomical to erect them except in extremely large plots. Rockefeller Center's three-block superblock was the rare exception.

Increasingly, the perceived need of the builder-owner was for office towers rising above lower buildings. The specifications were difficult to fulfill. In large part this was due to fragmented ownership patterns. A number of projects, such as the planned

Larkin Building, which was to have been the world's tallest, did not materialize in large part because of difficulties encountered in assemblage. The difficulty and cost of assemblage increased in proportion to the demand for space at key locations. The two most notable developments in this period did not require any assemblage. In the case of the Empire State Building, advantage could be taken of an already available large site, that of the old Waldorf Astoria Hotel. But this site was far to the south of the hub of developmental activity which, at that time, was at 42nd Street and Grand Central. It took years for the building to be rented. True, this was also due to the general lack of demand for office space after 1930. Subsequently, however, when development did pick up again, it was to the north.

The developers of the Empire State Building traded-off superior environmental attributes against the locational advantages of transit access and proximity to the existing growth pole at 42nd Street and Grand Central.

This trade-off was made at Rockefeller Center, too. The trade-off was further emphasized when the decision was made to shift the bulk of office space away from an immediate Fifth Avenue location even further west to a location approximately midway between Fifth Avenue and Sixth Avenue, where it had been initially intended to build the opera house. Several

blocks north of 42nd Street and west of Fifth Avenue, this was, from the point of view of office development, still virgin territory.

Whereas the isolated Empire State Building failed to trigger further development, Rockefeller Center was to subsequently become a growth pole in its own right. The premium on superior environmental attributes at the time, then, was such that it was thought that improvements of these attributes could be advantageously traded-off against disadvantages in other key criteria.

The difficulties of assembling large enough sites to build 25% coverage towers in face of the demand for improved environmental attributes, had a number of effects:

- In 1930, there was a general feeling on the part of building managers and leading architects that the 25% of the lot area permitted for towers should be increased somewhat in exchange for less bulk in the lower portions of buildings. Had adjustments been made along the recommended lines, then more locations and site configurations would have lent themselves for tower redevelopment than under the 25% coverage provision. More intensive development closer to hubs of redevelopment could have occurred.
- Major tower developments took advantage of existing assemblages and assemblages that could be brought under control at a satisfactory cost. These were often on the extreme periphery

of nodes of developmental activity, e.g. Rockefeller Center or separated from these entirely, e.g. Empire State Building. Adherence, in the face of revised demands for space, to the stringent coverage rules, then, tended to encourage development to spread, to locate at the periphery of developing areas, to go where it otherwise would not have been likely to go. These large developments were often poorly served by transit and were at a considerable distance from transportation centers.

- By the early thirties, the air conditioning industry was able to serve all types of buildings except the skyscraper.[17] Under conventional methods, conditioned air was distributed from central station equipment through bulky ducts along walls and ceilings.
- The need to improve environmental attributes of space built under the zoning resolution led, in addition, to the articulation of the free standing 25% coverage tower, to vigorous attempts to perfect air conditioning technology for skyscrapers. The rationale of the skyscraper was to provide large amounts of floor space on small but expensive lots. The principle need then was to eliminate bulky ducts which consumed valuable cube footage.

Development of air conditioning technology progressed during the thirties, but it was not until after 1945 that air-conditioning was to become a major factor in New York City office building. By 1935 ten of Rockefeller Center's buildings had been completed.

In 1936 the Time and Life Building was designed.[18] In that all cubage was cut away from the building's base, the building reflected future trends in office tower construction. With its base setback sufficiently on both the 49th Street and Rockefeller Plaza lot lines, it rose 33 storeys without setback.

On March 21, 1936, the Regional Plan Association proposed a zoning revision to limit bulk of buildings for New York City business districts.[19] In claiming that it was obvious that the financial and midtown sections of Manhattan -- as well as the downtown business district of Brooklyn -- "had developed a much greater intensity of business buildings than is economically and socially desirable," it noted that even though this was the case, legally achievable densities were still far in excess of the average obtained over a considerable number of adjoining blocks. More stringent restrictions, therefore, RPA argued, could still be effectively applied to prevent further unjustified concentration of density.

The principle innovation was the concept of establishing a limit to the amount of cubic footage of built space allowed per square foot of lot area:

- Within existing skyscraper districts a limit of 120 cubic feet for each square foot of lot area,
- for less important business centers, a limit of 85 cubic feet for each sq. ft. of lot area.

Tower coverage was to be reduced from 25% to 20%. A standard first setback was to occur at 60 feet above the street level, along both front and rear lot lines, at which level the wall was to set back 25 feet. The set back at side lot lines was 10 feet. In central business districts, buildings could cover 90% of corner lots and 80% of interior lots, in less important business centers, 85% on corner lots and 70% of interior lots.

No action was taken on the proposals. With cessation of office building, changing the bulk envelope regulations ceased to be a priority issue.

Within the confines of the 1916 geometric framework various responses to its negative impacts were tested. These responses often tended to create, in and of themselves, new problems. For instance, when developers sought to provide structures with superior environmental attributes on large sites in 25% coverage towers, they found that the only suitably sized sites were at secondary locations. The generating of an accompanying separate subset of locational problems contributed to the accelerated exploration of alternate avenues of relief. These were air conditioning and fluorescent lighting.

Air conditioning and fluorescent lighting were to reduce the dimensions of the problem of light and air. Consequently, as will be seen in the next chapter, the necessity to develop away from the hub of development was reduced.

Chapter 3

The 1944 Pre-Building Boom Attempt to Upgrade the Quality of the Future Spatial Environment

This chapter reviews the varied reactions to a proposal to modify the 1916 Zoning Resolution and explains the reasons for its rejection by real estate interests. It analyses the shift of the factors impinging on office building construction in the post-war period.

Zoning amendments that would require all new buildings throughout the city except manufacturing and industrial structures to comply with more stringent height and area restrictions than those in force were proposed by the City Planning Commission on June 14, 1944.[1] The purpose of the proposed changes, which were sponsored by City Planning Commissioner Robert Moses, was "to increase the open space, light and air about buildings hereafter erected by raising zoning standards as applied to the height and bulk of structures." The Commission declared that restrictions in the original zoning resolution of 1916, which was intended to prevent excessive building density, had proved insufficient. Overcrowding of land in the last twenty-five years "has far exceeded anything imagined when the zoning regulations were originally drawn." The Commission found that this phase of zoning had lagged far behind the restrictions of

the Multiple Dwellings Law in many areas of the city. "There is enough land in New York City -- even in Manhattan -- to enable all buildings to have adequate light and air," the Commission declared. "Nor has it been demonstrated that non-residential buildings of great height and bulk are more profitable than those which have sufficient space around them." They commented:

> Much of the overcrowding of land in New York took place after the last World War (WWI) and helped accelerate blight in many sections. This, in turn, caused great shifts in population with corresponding losses in realty values.
>
> It is hoped that the present war will be followed by substantial rebuilding of old areas and it seems to the Commission that every effort should be made at this time to facilitate such redevelopment along sound lines and without encouraging congestion and blight.

The amendments proposed by the Commission with respect to open areas on building sites would raise standards by requiring new structures to meet the requirements of the class above that in which they would be listed under then existing rules. The same progressive stiffening of restrictions was proposed with respect to building heights.[2]

In zones where buildings were then allowed to rise to the exact width of the street, without setbacks, it was proposed to reduce the maximum heights to seven-eighths of the width of the street. In those sections, which included most residential districts, where buildings could rise to one-and-one-half times the width of the street before they must be set back, the

maximum height before set back would be cut to one-and-one-fourth times the width of the street.[3]

In an editorial, "For More Light and Space," published on the day that CPC hearings were scheduled, the New York Times urged support of the proposals.[4]

In a letter to the CPC Edward M. Basset (father of zoning) urged that the Commission put the proposals into effect at once. "There was too much congestion when zoning started," he wrote, and "there is too much now. New congested construction can be continued after the war if the zoning resolution is not amended. Now is the time to make another step ahead. The future welfare of the city demands it."

While the Citizens Union urged immediate action, the representatives of savings banks and builders associations, Citizens Budget Commission and the Commerce and Industry Association wanted time to study the impact of the proposed restrictions upon land and building values.[5] One builder suggested that it was unfair to put new restrictions on height and density of buildings into effect on short notice and inflicting hardship on persons who had paid for plans for new buildings to be constructed under existing restrictions.

During the hearing, Mr. Moses was tireless in pointing out that light and air requirements in public housing were at least four times as great as those inherent in the proposed changes in the zoning resolution.[6] He also called attention

to the fact that the light and air requirements of the Multiple Dwellings Law were greater than those the Commission was suggesting for new structures.

On the second day of hearings, Wednesday, July 12, an August 1 deadline was fixed by which all objections, memoranda and suggestions not heard at the two hearings be submitted to the Commission.[7] In doing so, the Commission disregarded the requests of spokesmen for many civic organizations, real estate groups and banking interests for additional time to study the proposals and their effects upon property values and development. Among those seeking more time were Clark G. Dailey, chairman of the Planning Committee of the Real Estate Board of New York, Harold M. Lewis, consulting engineer for Borough President Edgar J. Nathan Jr. of Manhattan, and Sidney Strauss, president of the New York Society of Architects.

Commissioner Moses in defending the proposed restrictions on height and bulk repeatedly indicated his belief that "the general welfare of the public and not the individual welfare of real estate owners and banking groups should be the prime consideration in making zoning changes."

The Greenwich Savings Bank cited a hardship that it would endure if the new rules became effective.[8] It had recently acquired by foreclosure several parcels of real estate on Third Avenue, extending from 44th to 45th Street. The banks foreclosure was based upon a $960,000 mortgage, representing

a loan for that amount, made in 1929 upon property then assessed for a bit more than $1,000,000. After asking the bank's representative if he thought the welfare of the people of the city should be affected by "a bum loan your bank made," he exclaimed, "I don't think the Planning Commission should be a rescue expedition for your bank." Several individuals requested that a period of grace be allowed before the new restrictions became effective. The Commission showed little interest in the appeal.

The period of grace would have allowed architects and builders to make use of plans already "on the boards," for sites already acquired with the intent of carrying out improvements under the then existing regulations. The sudden impact of the amendments, they maintained, would force many changes in post-war building programs already being drawn up, retarding building activity. Building values would be reduced and new construction would be put at a disadvantage with existing building.

Harry M. Prince, architect and former deputy commissioner of the Department of Housing and Buildings, in calling attention to the fact that by the proposed amendment buildings erected in the future in New York would be more restrictively regulated in relation to their heights, bulk and the amount of a lot that may be covered by the structure, said: "It has been stated that the resulting effect would be a reduction of 20% to 42% in potential

income in certain projected types of buildings in some of the congested areas of Manhattan, and to a lesser degree, in other sections of the city."[9] H. I. Feldman, architect, criticized the proposal as being likely to retard post-war planning, pointing out that many builders already have made their plans for post-war construction of apartment houses and other improvements on the basis of present rules, and would have to chuck or revise these plans at considerable cost.

> Fairness and precedent require a reasonable grace period. Prices paid for building lots are predicated on the utility to which the plot may be put. Had builders known of a contemplated change in the law, they undoubtedly would have bought land on a different basis and made architectural commitments accordingly...The proposed amendment will not permit greater areas to be occupied on the first floor level than on the second-floor level. This requirement will diminish the value of store rentals and prevent latitude of store design for sufficient depth such as is customary in chain stores or large restaurants." 10

The Real Estate Board of New York, in its objections to the amendment,[11] took up the same point:

> In a B district no building used for residence and no non-residential building located in a residence district, local retail district, a restricted retail district or in a retail district, as designated on the amended use district map, shall occupy at the curb level more than 65% of the area of the lot if an interior lot, or 80% if a corner lot, exclusive in each case of lawful garages.

Such a requirement, the Board explains, would have prevented erection of such structures as the Macy and Altman Department Stores and the Radio City Music Hall. It argued that such a restriction would be detrimental unless made to apply only to

residence buildings and non-residential building in residence or local retail districts.

The West of Central Park Association argued that the attempt to reduce population densities and building sizes as proposed in the amendment would, in effect, subsidize owners of improvements built under the existing provisions at the expense of the owners of land previously unimproved, in that in some districts the permissible height of a new building would be reduced by as much as 25%. The association suggested that instead some tax incentive be granted to a builder taking "less than the law allows" in the matter of building height and site coverage.[12]

The Board of directors of the Home Title Guaranty Company, in a resolution[13] urging caution in the adoption of the new zoning law, said it was so drastic that it may defeat the very purposes that are urged in its support. Their action, the directors set forth, was prompted by their company's interest in the maintenance of the value of the New York real estate, in the substantial rebuilding of the city, which should occur within the next brief period, and in the maintenance and improvement of the real estate tax base of the city.

The resolution states that the Board:

> urgently requests that this vital zoning change be not hurriedly adopted, especially during the Summer months, and that the final consideration of the proposed new law be deferred for a period of time ample to give both the members of the City Planning Commission, and interested organizations and citizens of the city a full opportunity to study the law and its effect upon the

real estate and finances of the City of New York.

The Chamber of Commerce of the State of New York stated in an interim report that in B area districts in which lies the central and greater part of Manhattan, the proposed law, while not affecting existing buildings, would restrict any new building in an interior lot to 65% of the ground area at the curb level. "The Committee believes that it is unfair to penalize the owner of such a lot from building a retail structure under such limitations."[14]

On August 5, 1944, the Fifth Avenue Association joined the ranks of the opponents.[15] A representative of the Building Trades Employers Association told the Commission that his organization was "concerned" about the possibility that the proposed restrictions would discourage new private building after the war, thus interfering with reemployment of thousands of men in the building trades. Thomas Jefferson Miley, secretary of the Commerce and Industry Association of New York, Inc., wrote to Mayor La Guardia, calling for an abandonment of the proposed zoning amendments, because they would cause a reduction upto 1/3 or more of the space on a plot of ground any building may occupy.[16]

With Moses pressing for swift action, adoption of the amendment seemed imminent. As a result, in order to assure the owners of maximum height and land usage under the law as it then stood, a large number of applications for building permits were

filed.[17] They included plans for four new skyscrapers in Manhattan to cost more than $20,000,000, filed by Eggers and Higgins, architects, for different corporations representing the City Bank Farmers Trust Company:

- A 42 storey office building, with 1,084,000 sq. ft. of floor space, for a site on the east side of Sixth Avenue from 43rd to 44th Street. Acquired by the City Bank Farmers Trust Company at foreclosure 1932, it was being operated as a parking lot.
- A 35 storey office building, with 492,296 sq. ft. of floor space, at 646-50 Madison Avenue between 59th and 60th Street.
- a 42 storey tower at Sixth Avenue and 39th Street.
- A 37 storey tower on the West Side of Broadway from 38th to 39th Street.
- A department store at Park Avenue and 53rd Street.
- 2 apartment buildings at E 35th and E 36th Street.

Arthur C. Holden, President of the New York Chapter of the AIA, recommended that interim regulations be applied which would protect the public interest until a careful investigation, wide discussion and the working out of more up-to-date principles could make possible a really scientific revision.[18]

> It would be wise to set drastic restrictions now upon individual building and later to grant liberal modifications where group plans are worked out.
>
> The designers of too many of our skyscrapers and tall apartment buildings in the past have acted as though they wore horse blinders, which had shut out the rest

> of the block while the design was being worked out. Our primary need today is good block planning and better arrangement of groups of buildings. It will take time to develop the alternatives which should be the reward for good planning and good design. Meanwhile, there ought to be open-minded and understanding discussion.

In endorsing the proposed amendment, Holden described it as a "makeshift" which would raise questions, stimulate thinking and enlist the assistance of the public for the more detailed revisions to the whole structure of zoning, which are long overdue.

In a letter to the New York Herald Tribune, Holden said:

> It is now an open question whether it is best to go ahead with the interim proposals suggested by the Planning Commission or for the Commission to take the technicians of the city into its confidence, and by concentrated work during the next two months produce a comprehensive rewriting of the whole zoning ordinance.
> 19

To this, Moses immediately replied:

> The drastic changes proposed by Mr. Holden and his friends contemplate establishing an entirely new bulk classification, with twenty or more subdivisions, in place of the present height and area restrictions. Any such scheme would take not two months to work out, as Mr. Holden so artfully suggests, but somewhere between ten and twenty years, and at the end of this period, I prophesy that the plan would either not be adopted at all or would be so shot to pieces by modifications that it wouldn't be worth adopting... Minor changes which have been made have taken not months but years to get through.

On August 30, 1944 the Planning Commission, responding to pressure brought to bear in the main by midtown real estate interests, agreed to stage a second round of hearings.

At the hearing on September 13, 1944, Commissioner Irving V. A. Huie outlined the elements of an alternate plan. The plan was not an official item of the agenda. Under it different FAR ratios were to be superimposed on existing height and area restrictions.[20] Existing envelope restrictions were to be relaxed, so that the maximum bulk could be distributed on the site in almost any way the developer saw fit.

- A FAR of 20 was set for business buildings in the Wall Street and City Hall Districts in Lower Manhattan;
- A FAR of 18 was proposed for business buildings in the Grand Central and Times Square Centers;
- A FAR of 15 was set for most other business sections.

While Huie's proposals were considerably less restrictive in business districts than those proposed by the CPC majority, residential controls would have been tightened. It was in the residential districts, where little development had occurred and land values were comparatively low, that owners could more readily absorb the reductions in permissive bulk without unbalancing the economy of building construction. Such inequalities proved the need for one type of treatment for business areas, and an entirely different formula for residential areas, Huie held.

For residential building around Central Park, along Riverside Drive and other park neighborhoods, an FAR of 6 was to be applied along the west side waterfront below 72nd Street, FAR 7, and in Upper Manhattan, a FAR of 5.

In September 1944, Robert W. Dowling, president of the City Investing Company, joined with Lindsay Bradford, president of the Title Guaranty Company, Robert Catharine, president of the Dollar Savings Bank, John Adikes, executive vice president of the Jamaica Savings Bank, Arthur A. Johnson, president of the Arthur A. Johnson Corporation, in signing an invitation to civic and trade organizations to form a Citizens Zoning Committee to organize opposition to the city zoning plan.[21] Among the co-signers was Stephen F. Voorhees of the architectural firm of Voorhees, Walker, Foley and Smith.

On September 28, 1944, a meeting was held in the offices of Manhattan Borough President Nathan. Among those present were representatives of the New York Real Estate Board and the Bronx Real Estate Board. On the agenda was how to win support for Huie's proposal.[22]

The invitation of key real estate leaders to organize opposition to the impending zoning amendments met with a strong response and on September 29, 18 civic and trade organizations formed the Citizens Zoning Committee. A survey of the member organizations indicated considerable support for the Huie plan as a subsitute for the Moses plan. Three days later, on October 2, 1944, a 10 man CZC Steering Committee was constituted and Robert W. Dowling elected president. Bank and Insurance Company

presidents were in the majority. Construction industry interests were also strongly represented.[23]

Frank Voorhees of Voorhees, Walker, Foley and Smith, the architects, was also a member. Groups IV and V of the Savings Banks of New York had retained his firm to undertake a survey on the possible effects of the zoning plan, particularly as it would effect midtown Manhattan. The architects came to the conclusion that the changes would have an adverse impact.

In their first public statements, CZC said the amendments before the Planning Commission were:[24]

> so sweeping in their nature they constitute in effect a new zoning law - the first since the adoption of the present Zoning Resolution in 1916. The amendments may be ill advised and need more study.

The Citizens Zoning Committee convened a 5 man panel of architects to study the zoning and to provide material that would furnish the basis for definite scientific conclusions. Ralph Walker represented V. W. F. and S.

When the Planning Commission met again on October 4, CZC tried to speak on Commissioner Huie's alternate proposal. But as the amendments were not part of the agenda, Chairman Salmon ruled against the taking up of the matter.

In the week ending October 8, 1944, realty trading approached a new peak of activity. This was in large part due to the anticipated zoning changes. In anticipation of the City Planning Commission's taking affirmative action in the question of

reducing allowed bulk, a spate of building plans were filed in the last weeks of October.

On November 1, 1944, the Commission met to formally approve the plan. The way for action to be taken by the Board of Estimate was clear.[25] Commissioner Huie, although acknowledging the need for immediate remedial action to bring the zoning resolution into conformity with modern standards, opposed the measure. Huie had requested that an analysis of the effects of the proposed amendment be undertaken. When the Commission refrained from making such an analysis, Huie undertook his own. He listed the proposal's weaknesses in his dissenting report:[26]

- They were too drastic in the highly assessed business districts, i.e. midtown Manhattan and lower Manhattan, in that the amendment proposed to reduce the permitted heights and set backs by changing each existing height district to the next more restrictive one and similarly, each area district to the next more restrictive one, it would seem, he explained, as though it were one additional restrictive step all around. That, however, was not the case, since the combination of height restriction and area change, plus increased setback requirements, plus the increased yard requirements, resulted in additional restrictions not readily envisioned. As a result, and particularly in the B Area District, e.g. most of midtown, the combined restrictive effect was unreasonably drastic. The

permitted floor space in A and B Districts would be reduced by as much as 45% and, in some cases, even more.

- On the other hand, however, Huie pointed out, the amendments made no changes in the existing provisions relating to tower construction under which 25% coverage limitation allowed penetration of the sky-exposure or recession plane and unlimited height.
- Moreover, the proposals nullified any possible accomplishment in the direction of restricting ground floor coverage, he said, by permitting as much as 100% ground floor coverage where off-street parking or unloading facilities were provided. Conceding that the provision of parking and unloading facilities should be encouraged, he expressed the opinion that both objectives could be accomplished without interfering with each other.

Huie made note of the "most favorable public reaction" from men of integrity and ability and responsible organizations that his proposal had received, who had found it clearer and better than that of the CPC majority.

Ten days later, on November 10, the CZC, whose ranks by now comprised 51 civic trade and labor organizations, adopted a program favoring "immediate, more effective zoning," and added restrictions on residential and business buildings, but opposing the zoning revision approved by the CPC and about to come up before the Board of Estimate. The member organizations

agreed on a platform objecting to the CPC's amendments on the grounds that they "penalize the small retail businessman, would interfere with post-war building and employment in the city and tend to perpetuate blighted and obsolete parts of retail districts."

The group made known that it was particularly opposed to the principle of area restriction in retail districts, "however great or small the limitation on area use might be," and said it would work for preservation of existing rights for use of full ground areas and street frontages for retail buildings.

CZC reasserted its basic support of Commissioner Irving V. A. Huie's alternative proposals, expressing the view that they would:

> produce maximum public benefit without destroying values, constitute a more positive and simpler method of zoning and would not discourage post-war building activity.27

On November 13, 1944, a major rally was staged at the Metropolitan Museum of Art, at which the Board of Estimate was urged to approve the zoning changes. It was sponsored by the Women's City Club of New York, the Citizens Housing Council of New York, the Citizens Union, the Women's Trade Union League, United Neighborhood Houses of New York and the Brooklyn Committee for Better Housing. Four Commissioners of the City Planning Commission spoke in support of the amendments, Edwin Salmon, Chairman, Cleveland Rodgers, John C. Riedel, and Robert Moses.[28]

Of Commissioner Huie's alternate plan, Robert Moses said it was highly controversial and exceedingly intricate. He conceded, however, that the plan was worth further study.

Many of the building plans that were filed "to beat the gun" were filed by savings banks and other banks. Moses denounced this practice of savings banks in filing "fake plans" and joining "unscrupulous real estate speculators," in efforts to prevent the city from curbing the excessive height and bulk of buildings.

> The rush to file building plans to beat the gun was in order to create a market for sour investments.

Most of those who filed, Moses said, had no money in hand or in sight and never expected to build. Of $76,000,000 of proposed buildings, almost $10,000,000 had been filed by savings banks, Moses reported.

> There is no provision in the law for them to build and we have taken the matter up with the State Superintendent of Banking. If we don't get an answer from them, we'll get it from the Governor.29

In a letter to the Deputy Superintendent of Banks Moses recalled his investigation of the Banking Department in 1929, when he found:

> ...that the Department had ceased to protect the public and to carry out the spirit and intent of the banking laws. I am sure you will agree that this should not happen again.30

Many of the building plans were filed by representatives of the State Insurance Department, which held a lot of property taken

from the title companies then in liquidation. Under the name of the State Commissioner of Insurance, plans for $17,000,000 were filed in connection with liquidation of property under his jurisdiction. Criticizing such lack of cooperation, Moses appealed to the State Insurance Department and the plans were withdrawn.

On the same day as the rally, further opposition to the zoning resolution amendment was voiced in a letter sent to members of the Board of Estimate by the Midtown Real Estate Association:

> The roughshod attempt by the City Planning Commission to railroad this ill-conceived and ill-advised amendment through over the united opposition of property owners affected is particularly reprehensible...
> The Commission's deliberate intent to prevent the small property owner from changing or improving the use of his land or force him out of business, strikes at the very root of the principle of ownership of private property. We are confident that the members of the Board of Estimate still believe and adhere to that principle.

Five days later, on November 14, 1944, most of the 50 speakers at the Board of Estimate hearing voiced their opposition. The attack was led by spokesmen for the CZC. Commissioner Moses and Chairman E. S. Salmon indicated their belief that most of the opposition, although ostensibly directed against details of the proposed changes, was designed to block any change. The Board of Estimate deferred taking action until November 30.[31]

On November 21, the CZC notified the members of the Board of Estimate that Commissioner Huie had accepted certain changes

in his proposal made by CZC. They reaffirmed their support of the alternate proposal.

On November 23, Mayor La Guardia issued a statement in which he and the Planning Commission agreed that if the Board of Estimate passed the Moses plan, the Planning Commission would present an amendment that would afford relief to the owners of small business properties. Under the proposed amendment coverage on interior lots less than 5,000 sq. ft. would be increased from 65% to 75%. Corner lots were to continue to be subject to the 80% restriction and larger interior blocks to the 65% restriction. This was to benefit small lots of 50 feet frontage or less.[32]

Shortly before the Board of Estimate was to take affirmative action, it became known that the Midtown Real Estate Association was collecting signatures in favor of the amended Huie proposal and against the Moses plan. The Association's president, Thomas H. Doyle, pointed out that under the City Charter, if owners of 20% of the area affected or the owners of 20% of the land adjacent to the area affected object, then such resolution shall not be effective unless approved by the Board of Estimate by unanimous vote of the entire board. The protests were aimed in particular at the B zone retail area requirement, which would permit only a 65% coverage of the site by stores unless inside loading and parking facilities were provided, because this would unduly penalize the owners of small lots and stores of 50 feet frontage or less.[33] Owners of almost

9,000,000 sq. ft. of property in the midtown retail districts encompassing Fifth Avenue, Sixth Avenue, Broadway and Eighth Avenue signed.

Nevertheless, although four borough presidents -- of Manhattan, Bronx, Brooklyn and Richmond -- moved to defeat the amendments, they were overriden by the Board of Estimate's appointed city-wide officers and Queens Borough President, by 10 to 6. Real estate interests were particularly bitter at the voting. The president of the Real Estate Board of New York pointed out that a few of the Mayor's appointees had the power to pass laws although the majority of the elected officials in the Board of Estimate were opposed.[34]

In consequence of the new zoning laws, the Department of Housing and Buildings began the revocation of building permits it had granted prior to December 1, 1944, in cases in which the proposed structure failed to meet the more restrictive requirement of the new law and on which no substantial work had been undertaken.[35]

Robert Dowling wrote the Planning Commission that the doubt and confusion caused by the zoning changes had resulted in a complete stoppage of plans for post-war building in retail areas. Dowling and the CZC had not given up yet, though. It engaged Paul Windel, former corporation counsel, to fight the changes in the courts. A case against the city was brought by the 431 Fifth Avenue Corporation. Paul Windels argued that the

City Charter required unanimous approval by the Board of Estimate in such legislation, if protests were filed by owners of at least 20% of the area affected.[36]

On April 27, 1945, Justice Bernard L. Shientag ruled in favor of the city. The Plaintiffs then appealed the decision. The Appellate Division reversed the lower court by a three-to-two decision.

In spite of the amendment cutting back allowed bulks and coverage, no protection was afforded to residential areas, such as Greenwich Village, from encroachment by tall buildings. Early in 1945, a 30 storey apartment building was planned at the foot of Fifth Avenue facing onto Washington Square. These areas were not affected by the suit brought by the Citizens Zoning Committee.

There was widescale neighborhood opposition to the plan. Local citizens were supported in their stand by Robert Moses who said:

> We mean to revoke the double bonus which accrues at present to people who put Chinese walls around New York's little open spaces.

Moses drew up a zoning amendment which would limit the height of buildings surrounding New York's park space to street width. For the Washington Square area, this would mean no building more than 7 or 8 storeys.[37]

The would-be developer's response:

> I'm pretty sure Mr. Moses can't do this to me because I saw him coming and rolled up my sleeves. I've got the Real Estate Board in one pocket and a bankroll in the other.

One of the first postwar skyscrapers to go up in midtown Manhattan under the new zoning laws was the 33 storey Esso building, designed to house and consolidate the metropolitan offices of Standard Oil.[38] Fronting on Rockefeller Center and located between 51st Street and West 52nd Street, the new building could occupy only 65% of the land area above the second floor. Under the new law, however, fuller land use was permitted to buildings providing off-street parking and loading facilities. Total land coverage on the ground floor made necessary an off-street basement parking area. Either alternative would have ruled out such a project as the Empire State Building, population 15,000 persons, which provides not a single parking space. The projected structure was to be the tallest New York office building to be completely air-conditioned -- not merely air-cooled. Provisions were made for year round cleaning of the air and for humidification or dehumidification according to season, plus standard cooling and heating.

On July 23, 1946, the Court of Appeals affirmed the Appellate Division's decision, declaring that the Board of Estimate of New York City had improperly approved the zoning amendment restricting the height and area of new buildings in retail business sections. The 20% rule did apply and the vote had not been unanimous.[39]

Moses declared:[40]

> It is impossible for me to understand how the courts have reached such a conclusion. The effect, of course, is to nullify our attempt to reduce congestion in the central business section of the city in the face of the terrific demands for relief by the same interests that have opposed the zoning... Apparently we were too far ahead of the procession.

Dowling hailed the decision as of far reaching importance to realty and investment interests through opening the way for post-war building developments unhampered by unwise restrictions. A CZC spokesman, in reiterating that setback and similar provisions were sufficient to provide the necessary open space, light and air, and to prevent overcrowding and congestion, said it wanted to retain the right to build on the whole surface of the land.

The Commissioners of the Department of Housing and Building said the court's decision would undoubtedly affect real estate values.

When the zoning amendment was declared invalid by the State Court of Appeals in 1946, many office building plans were revised back to the more lenient pre-amendment conditions. However, in the case of the 33 storey Esso Building at Rockefeller Center, plans were left unchanged. Architects Carson and Lundin said:[41]

> Our design is in harmony with the policy pursued when the previous Center buildings were planned to avoid congestion and provide maximum light and air...

But many other builders sought to amend their permit applications. Architects Kahn and Jacob, in anticipation of the zoning decision, had designed the 21 storey Tishman Building for conversion to 100 per cent coverage by inserting additional steel tiers. This revision achieved 175,000 feet of additional rental space above the first floor and a substantial increase to basement storage capacity through the elimination of the required off-street garage. Tishman, the owner, estimated that the difference came to about $375,000 in annual rents.[42] In another case, the 19 storey $4,000,000 Crowell-Collier Building, the architect said:

> If we could have developed plans without regard to Moses coverage restriction, it would have been possible to get the same square footage of space and at the same time reduce the building by four storeys. 43

With the invention of the Conduit Weathermaster System by Willis Carrier in 1939, the efficient air conditioning of skyscrapers, new and old, was made possible. On August 12 1939, he filed his patent application and in 1944, four separate patents on the system were issued on July 11, August 15, and November 28, 1944.[44]

Another parallel technological development reinforced the mechanical possibilities for office-block air-conditioning, namely fluorescent lighting. Of great significance was fluorescent lighting's diminished heat output by comparison with incandescent lighting. This was to make PSALI (Permanent Supplementary

Artificial Lighting of Interiors) a viable proposition. Without such diminished heat output, illumination at the core of very deep floor-plans would have led to loads too great on any kind of an air conditioning system for such deep spaces to be viable.

Of essence was the mutually reinforcing effect of the convergence, at one point in time, of these two technologies; i.e. without the diminished heat output of fluorescent lighting, air conditioning technology would not have been able to cope with deep space. The convergence of these two technologies happened at a point in time at which:

- there was a non-existent vacancy rate;
- there had been no new construction for years;
- there was a significant pent-up demand for space.

To a considerable extent, real estate anticipated and took into account the developmental possibilities of such a convergence of the two separate branches of technology, when making their dispositions for resumption of construction in the post-war period. The parameters, then, had changed drastically since construction of the Rockefeller Center and Empire State Building of the 1930s. There was no longer a compelling perceived need on the part of developers:

- to cut away bulk at the base of a building to improve light

and air;

- to assemble large sites so as to be able to build 25% coverage towers, set well back from the lot line;
- given sealed air-conditioned buildings to set back from the street with the bulk of the rentable space of a building, in order to lower the noise level, emanating from the streets, to the tenants.

There no longer was a need to trade-off location against superior environmental attributes. The convergence of air-conditioning and fluorescent lighting made it possible:

- to lower ceiling heights
  a) as lighting of deep space was not dependent on large windows and the concomitant high ceilings,
  b) forced air circulation reduced the needed cubic footage of air-space per building occupant;
- to consider floor plan configurations that did not allow for cross or diagonal ventilation.

In consequence, developers saw attractive possibilities to lucratively build on all manner of sites. They did not need to build the massive skyscraper with its very large increment of space, brought in at one time, with its ever present threat of depressing the market. (It was the massive skyscraper, as will be recalled, that had been a prerequisite for providing superior environmental attributes.) Consequently, the developer could tread cautiously, i.e. test the market and bring in moderately

dimensioned increments of space. The developer could respond to fluctuations in the vacancy rate. Not only could the developer build on small and moderately dimensioned sites, but he could also, by virtue:

- of the reduced ceiling heights,
- space conserving air conditioning ducts,
- and greater coverage now possible through PSALI greatly increase achievable densities on such sites.

From the point of view then of the Central Commercial District's real estate interests, there was unanimous opposition to the sweeping amendment to the bulk regulations introduced in 1944, i.e. at the very same time that the patents for the Conduit Weathermaster System were being issued. The reasons were the following:

- By lowering allowed cornice heights and applying a steeper sky exposure plane, the bulk envelope of non-tower portions of buildings would be substantially reduced. It was just this portion of buildings that builder-owners were turning their attention to, as it allowed them to concentrate the mass of rentable space closer to the ground - given air conditioning and lighting - than were they to build towers.
- While in the 1930s cutting away the base of towers was indeed an incentive, there was, for the aforementioned reasons, in the mid 1940s no apparent compelling necessity to do so.

I.e. it was more economical to concentrate space close to the ground in the kind of envelope existing, than to put the space that would have been lost by reducing the cornice height and applying the steeper sky exposure plane back into a 25% coverage tower (which, as will be recalled, was neither under the 1916 code nor under the 1944 amendment, subject to any density limitation).

- Diseconomies of traditional tiered construction were not yet to be felt, as large numbers of skilled workers were released from the war effort,
- and the steel industry sought new markets.

The Universal Pictures Building completed in 1947 reflected the new trends possible.[45] It is a tiered building and although it occupies a whole block front on Park Avenue, it does not avail itself of a 25% coverage tower. The structure was supposedly New York's first fully air-conditioned office block. By the beginning of the 1950s, nine great Carrier air conditioned office buildings had been erected in New York.[46]

In 1951, 100 Park Avenue, an office building just one block south of Grand Central Station, was completed. Occupying the entire Park Avenue frontage between 40th and 41st Street, it reached back along both streets -- 150 feet on 41st Street, 280 feet on 40th Street. The site was L shaped. The Office building with an FAR 20 displaced the Murray Hill Hotel. The prime design objective was to maximize cubage within the bulk

envelope. The adopted solution was a 36 storey structure with setbacks at the 9th, 11th, 14th, 15th, 17th and 21st floors.[47]

Above the 21st floor, there rose a 25% coverage tower. The building took full advantage of the new possibilities to maximize bulk under the 1916 zoning resolution. Advantage was also taken of the possibility to drape curtain walls over irregularly shaped building envelopes made possible by a 1937 amendment to the New York Building Code affecting business buildings over 40 feet in height. Until then, such buildings were required to have masonry spandrels. Under the change, spandrels of any form of construction were allowed provided the materials used had a required fire resistive rating of two hours. With the advent of air conditioning, the continuous window module and the curtain wall that could provide much more light than if window piers were used in conjunction with permanent supplementary artificial lighting of interiors, floor heights could be cut back.

Prior to air conditioning, it was considered imperative that floor heights vary between 11'0" and 12'6". With its advent, heights ranged between 10'8" and 11'6" for buildings constructed of structural steel, dependent on the nature of the space, its typical dimensions and types of occupancy. While 8'6" was found to be adequate for any office up to 20 feet x 24 feet, in large open clerical spaces this height would appear oppressively low. Thus on large lots Emery Roth & Sons provided maximum floor to floor heights and in narrow smaller lots 10'8" floor to floor.[48]

Where large interior spaces were to be provided, they worked with a 9'0" clear height which, with normal column spacing, could be easily maintained with 11'4" to 11'6" floor to floor height. The minimum clear floor to finished ceiling dimension was 8'6". With the elimination of the environmental deficiencies of deep space, the rental value of deep office space had risen to around $5 per sq. ft. An additional contributing factor was the desire of many large corporations to house their clerical staff on large floors.

One Hundred Park Avenue, then, is an example of how air conditioning and modern lighting upset the equation between better urban design and improved profits that had been carefully worked out in the open plan layout of Rockefeller Center.

The trend was, however, to be of limited duration. Again, there was to be a reversal of the trend back to the high-rise office building, rising perpendicularly from a low rise podium or alternately from a plaza. New York City's investing builder's requirements were changing. A sustained building boom was reckoned with. No longer was the high coverage, high density, squat building on small sites so desirable. More and more, there was a demand for prime peripheral space, i.e. space with outlook, as increasingly corporate headquarters sought to locate in New York City. As in the thirties, allowable mass at the base of the building was again cut away to allow for a sleek and slender tower. Given the 25% coverage limitation, which only allowed for

a relatively modestly dimensioned tower plan configuration, no deep space necessitating permanent supplementary artificial lighting of interiors was required.

In 1952, a new skyscraper was completed at the 48th Street corner of Fifth Avenue at 600 Fifth Avenue, next to Rockefeller Center. With 6,612 sq. ft. gross, 5400 net, it had the smallest tower floor erected anywhere in the U.S. since 1930.[49] The tower was atop a building bulk which almost completely filled the allowed building envelope upto the 7th floor. Another 30% of cubage could have been built around the base of the tower, had there not been a special arrangement with Rockefeller Center. Under the agreement the new building acquired 60 front feet on 49th Street, thus gaining underground access to the Rockefeller Center concourse and sub-basement servicing. In consideration, the owners agreed not to block out any windows in the nearest Center unit and to position its 25% tower close to 5th Avenue. As a result, on the Avenue side the building's set backs had to stop at the 7th floor, instead of staggering on to the 18th, possible if the tower had been located further back.

Also in 1952, Lever House was completed. Its construction had been announced in 1950.[50] Lever House's floor space was to be only 6 times the land area of its plot, compared with 12 times the site at Rockefeller Center, 25 times the site at Empire State and 20 times the site in almost all of New York's other post-war office buildings. It differed from the prototypical

post-war envelope-filling building in a number of significant ways:

- At street level, Lever House created an open, partially covered patio, thus passing up an estimated $200,000 a year that stores would have paid for the Park Avenue retail frontage at $10 to $12 a foot.
- Cubage was cut back to allow a slender tower to rise from above the second floor. All the tower floors had 8,700 sq. ft. gross, with 6,000 ft. of usuable office space.
- Most of the office space was to be within 25 feet of a window.

The advantages to the Lever Bros. were that they would have 21 floors to themselves; they would get only the finest daylighted offices instead of bulk space up to 90 feet from a window; and they would derive prestige and advertising value from the distinguished building.

This brief review of representative buildings in the immediate post-war period shows how, after the war, a completely new office building type emerges, one quite different from its predecessors of the prior cycle of office building activity, the free-standing tower. The squat high-coverage high density office building that, by virtue of the combination of air conditioning and fluorescent lighting, did not need to avail itself of the 25% coverage tower to provide environmentally adequate space, as the previous generation of office buildings had needed to do, had a number of important consequences. It reduced the premium

on the need to assemble particularly large sites, which were needed if 25% coverage towers were to be built, i.e. small, medium sized, as well as irregularly shaped sites could be availed of. In consequence, it became more easily possible to provide space with satisfactory environmental attributes, where it was locationally more desirable, rather than at far out locations, as had been the case in the thirties with the McGraw Hill Building to the west of Eighth Avenue or the Empire State Building at 34th Street. As a result more developmental opportunities became available. More entrepreneurs could participate in the production of space. Sites that would have been bypassed because of limited size or awkward configuration, even though locationally desirable, became, with the new technology, suitable for redevelopment. The premium on assemblage was reduced. It became possible to bring in increments of space that could be more readily absorbed by the market than was the case with the extremely large increments of space brought in at one time by such structures as Empire State or the RCA Building, buildings that had much unrented space for many years. These large amounts of space weighed heavily, particularly so at the inferior locations of these buildings. It had become possible to test the market. Developers could tread warily with respect to the timing and size of increments of rentable space to be brought in, they no longer needed to commit themselves to very large increments of space as they needed to do when they

were building 25% coverage towers.

In that in the generation of office buildings immediately preceding the 1944 amendments cubage was cut away from the base of 25% coverage towers, the same was done, except in a more pronounced manner, as was proposed in the 1944 amendments, in which the 25% coverage requirement for towers of unlimited height was left standing.

The opposition to the amendments, then, is an expression of the real estate community's reassessment of entrepreneurial opportunities, given the large demand for new space after a prolonged period of no building and the ability to overcome environmental disadvantages through technological innovations that had become available in the interim period since cessation of construction in the thirties.

Only the more serious environmental disadvantages had been overcome, however. The problem of lighting and air conditioning space had been solved and in the initial period of redevelopment, with the demand for new space great, space was readily and profitably marketable if the two key attributes of the environment were available, namely adequate lighting and air conditioning.

As the most urgent needs for space were met, tenants became more discerning. The market for space became more competitive.

Tenants began to attach renewed significance to peripheral space. This was due not so much to the need of adequate lighting and not at all to the need of ventilation, but rather to the increasing demand for exterior executive office space with outlook. Whereas the Universal Building in 1947 concentrated all of its FAR 20 in a squat tiered structure with no 25% coverage tower, 100 Park Avenue, while maximizing deep office space on large floors, increased its percentage of peripheral space by surmounting the lower portion of the structure with a 25% tower. The building at 5th Avenue and 48th Street had to cut much of the bulk around the base of an excessively spindly tower, so as not to block light to the nearest Rockefeller Center unit. And Lever House, completed in 1952, in placing a premium on prime peripheral executive space, eliminated deep space altogether. To get both types of space, large standard floor plans were needed.

For renting reasons, it became increasingly desirable to provide such prime peripheral space, set well back from the avenue or street lot line. This improved the view from the offices. Moreover, a plaza would tend to enhance a corporation's prestige. Renting patterns and the economics of construction began increasingly to militate against tiered construction.

Given the 25% coverage provision, these objectives could only be achieved on the very largest of sites. Continued indiscriminate high-density high-coverage development of small and moderately sized sites was directly contradictory to the objectives of rehabilitating the quality of the environment. Moreover, it was felt that the threat of such "inferior" development -- poaching on values created by "superior" development -- to the limited extent that it could occur, and possibly undermining rental levels, needed to be averted.

This chapter has examined the reasons why legislation to upgrade the quality of the spatial environment was not enacted and has attributed failure to enact such legislation primarily to the exigencies of space production and marketing management as these were perceived by the investing building community at the point in time in question.

Chapter 4

The Harrison, Ballard and Allen Plan for Rezoning the City of New York And Office Building in the 1950's

This chapter reviews the efforts of the key real estate interests to get a new zoning resolution adopted that would be more in line with the exigencies of managing the production and marketing of office space than the 1916 Code. It identifies the key actors in the process and explains why the proposal was not adopted.

On October 24, 1947, Robert F. Wagner, Jr., was appointed by Mayor William O'Dwyer to the post of Chairman of the City Planning Commission. It was agreed between the two that a major revision of the Zoning Resolution was necessary. On January 19, 1948, Wagner, in declaring that the City's Zoning Resolution was obsolete in many respects, announced that the CPC had initiated steps to bring it up-to-date. Due to the fact that any substantial change in the city's zoning restrictions would affect property value directly, he said the Commission would not act until it had heard all interested parties and had held public hearings on proposed changes.

> Advances in architectural design and in engineering and building techniques, together with developments within the city in recent years, have made the Zoning Resolution obsolete in many respects.
> ... When the Zoning Resolution was originally draw, its scope was limited to structures built within a single

> block area. Today many developments are under construction or in the planning stage, involving developments covering many blocks. Since the present zoning was not designed for these large scale developments, it imposes severe limitations upon the most promising aspect of urban growth.[1]

Wagner estimated that the survey would take 18 months to two years, i.e. be ready by 1950. One month later, on February 18, 1948, Wagner announced:

> "We intend to establish a voluntary advisory committee representative of all segments of the industry, to serve to bring closer to the community the work of the commission."[2]

The planned major revisions of the zoning ordinance would help private real estate and building investment, Chairman Wagner said. He was speaking before an audience of 500 at a conference in the Hotel Roosevelt sponsored by 58 organizations, including the Regional Plan Association, the Citizens Housing and Planning Council and the Citizens Union. Among the speakers were the Vice President of the New York Life Insurance Company, Otto L. Nelson, and Robert W. Dowling, President of the City Investing Company. Dowling, who had played a key role in the development of the Metropolitan Life Insurance Company's big housing developments, Parkchester, Stuyvesant Town, Peter Cooper Village and Riverton, called attention to the fact that in Parkchester and its successors, buildings had increased from averages of nine and a half stories to fifteen stories with a corresponding growth in the amount of ground space left open for play areas and breathing spaces. In calling for twenty-six story residential buildings for the future, he argued that planned large scale communities permitted more efficient use of valuable city land and

made it possible for people to spend twenty-five percent less for rent.[3]

Robert Moses, in calling Mayor O'Dwyer's attention to the difficulties sure to be encountered in any drastic changes in the controls of private property, especially if new and complicated methods were employed, opposed a request from the Planning Commission for funds to retain the architectural firm of Harrison, Ballard and Allen to undertake a comprehensive survey of the zoning regulations.[4] On April 8, 1948, the Board of Estimate deferred action on the request but finally, on May 13, 1948, after intensive canvassing on the part of Wagner, Moses' objections were overriden and the expenditure of $160,000 authorized: "To obtain the research work, mapping and drafting work and recommendations for new appropriate zoning districts."

On September 21, 1948, the director of the Broadway Association told an advisory board that had been appointed by Manhattan's Borough President, to solicit proposals from Manhattan's business interests, that there was immediate need for rezoning the midtown area from Herald Square to Columbus Circle.

In 1949, Wagner successfully ran for the office of Manhattan Borough President. Late in December, following his reelection as Mayor, O'Dwyer appointed his campaign manager Jerry Finkelstein to the vacant post of Chairman of the CPC. In May 1950, Finkelstein turned his attention to the zoning study. At the first annual conference of the Association of State Planning and Development Agencies, Finkelstein quoted a letter from Mayor O'Dwyer, in which "a most careful study" of the possible effects that proposed rezoning would have on tax assessment was urged.[5] At the mayor's request,

Finkelstein announced that he had appointed:

- Robert W. Dowling, president of the City Investing Company
- Henry Bruere, President of the Bowery Savings Bank and
- William C. Boyland, president of the City Tax Commission, to

a special committee, to fully explore the tax angle before going ahead with a program of revising the zoning resolution.

On June 9, 1950, the special committee met for the third time in the offices of the CPC to discuss the specific anticipated impacts of Harrison, Ballard and Allen's proposals, on large commercial buildings.[6] The proposals had not yet been made public.

In August, the Dowling committee, in reporting on its findings on possible effects of the rezoning as proposed by Harrison, Ballard and Allen, on land values and assessments, said with respect to some of the proposals restricting the bulk of buildings in the central commercial areas that they "very likely will affect adversely the value of land where more intensive use was intended than the new regulations would permit."[7] The committee, however, expressed the belief that this situation and other possible technical flaws in the to be proposed zoning code could be corrected as the result of extensive public hearings that the city planned to hold on the suggested revisions. Finkelstein said that formal and informal hearings on the Harrison, Ballard and Allen plan could begin in December.

On August 12, 1950, the New York Times, in noting that for several months the Dowling committee had been seeking to determine what effect, if any, zoning revision would have on property assessments, pointed out that:

"The Committee believes that a few rough spots will be ironed out before any zone change becomes final."

The Times urged no further delay in disclosing the contents of the Harrison, Ballard and Allen plan to the public.[8]

Subsequent to the filing of the Special Committee's report to the CPC, Dowling wrote Finkelstein that the Citizens Zoning Committee would be reactivated to study the proposals and make suggestions for possible modifications to aid the "ultimate adoption of suitable rezoning of the city." He listed more than a score of bankers. builders, architects and business executives to serve as members of a steering committee.[9]

On August 23, a week after he had announced that he was resigning to become ambassador to Mexico, Mayor O'Dwyer, in outlining in summary form to a group of civic leaders the results of the two year zoning study, stressed that H.B. & A.'s reports were not the last word, that they would get a thorough hearing and that the people of the city should be the final judges as to just what rezoning they wanted.[10] O'Dwyer indicated that the full report would be made public about October 1 in time for the December hearing. He also paid tribute to Robert F. Wagner, Jr. who was chairman of the Planning Commission when the studies were started. Lawrence M. Orton, Planning Commissioner, who served as the agency's liaison office to H. B. & A. during the study, in turn praised O'Dwyer for making the work possible and for seeing it through "in the face of determined opposition."

During the election campaign, acting mayor Impelliteri refused to have publication and distribution of H. B. & A.'s report authorized.

Finally, on October 26, 1950 and too late to allow for distribution before the election, the Board of Estimate appropriated a sum of close to $10,000 for the printing and publication of 2,000 copies of the "Plan for Rezoning the City of New York." Each copy contained a statement that neither the Board of Estimate, nor the City Planning Commission, were in any way committed to its recommendations, and that the report's printing was authorized simply for the purpose of enabling the public to have a chance to view and study the recommendations made on rezoning. A further five months were to elapse before the consultant's report was finally released on April 29, 1951. The tentative date set for December hearings came and went.

With the release of the report, the nature of the objections of major Manhattan real estate interests became evident. In no small measure, limitations proposed for highest density commercial development provoked opposition of sufficient strength to block affirmative action on the plan.

Key issues around which debate between the representatives of real estate interests and Harrison, Ballard and Allen had centered were where maximum densities should be permitted and what the maximum density level should be. Representatives of real estate interests, in noting that since 1945 a number of new large commercial buildings had been constructed in midtown Manhattan that had floor area ratios in the vicinity of FAR 20 - e.g. the Tishman Building (FAR 18,0) 505 Park Avenue at 59th Street (FAR 19.0) and 100 Park Avenue (FAR 20,0), urged that permitted maximum densities be in excess of FAR 15, the maximum proposed by the consultants. Nevertheless, the

consultants, in referring to numerous discussions that they had on the subject, claimed that the consensus seemed to be that the highest density commercial district should have a maximum floor area ratio of 15.[11] FAR 15 was to be confined largely to areas where there was a predominance of buildings with very high bulk but which were not solidly built up at the "very highest bulks found therein," and where property values were high. FAR 15 was recommended in order to hold down the bulk and further congestion to what may still be an economic level for the builder and owner.

In midtown Manhattan FAR 15 was mapped

- 100 feet deep on both sides of narrow Madison Avenue between 34th and 56th Streets, on Fifth Avenue between 23rd and 47th Street along 34th Street between Madison Avenue and Seventh Avenue (Pennsylvania Station); from 40th to 43rd Street between a point east of Park Avenue to west of Sixth Avenue.
- In asserting that: "The extension of the highly concentrated area with very high bulk is not likely to occur over a wide area, nor is it desirable to extend this type of congestion over a broader area than it affects today," the consultants proposed a commercial district with a floor area of FAR 10 to be mapped north of the very highest concentration of commercial bulk in midtown Manhattan on
- 5th Avenue between 48th and 58th Streets, and along
- 57th Street, from approximately east of Sixth Avenue to east of Park Avenue.[12]

In both these districts a rear yard of only ten feet was required.

In calling attention to the many hotels, apartment buildings

mixed with some office buildings surrounding the highest bulk commercial center, the consultants proposed an FAR 10, and a 30 feet rear yard requirement, in order to protect the residential use, while at the same time not discouraging office uses. This mapping classification was proposed north of Grand Central Station on Park Avenue from 46th Street to 56th Street.[13]

Under 1916 zoning, access of light and air into streets and interior courts was poor. In recognizing that "light may come along the side or sides of a thin tall building instead of over the top of a wide building," H. B. & A. proposed to modify the regulations so that

> "a building could in effect drop one shoulder and raise the other, or have a tower in the middle, with open space on two sides. Or, as an alternative, one portion could be set back to compensate for another portion located closer to the street."[14]

To achieve these objectives it was proposed that the regulations merely state the appropriate angle of light obstruction for each district and that a developer be permitted to average the angle along the frontage. In order to safeguard against abuses of the averaging principle it was proposed that

- in each district the regulations specify a minimum angle to be allowed in averaging in recognition of the fact that the

  "building behind on the next street will be obstructing light below that angle in any event;"

- a minimum width is set over which a lower angle may be credited in averaging, in order to prevent narrow slots between buildings;
- limits to be set on the width of frontage over which angles may be averaged and on the width of the building projecting above the

average permitted angle in order to prevent massing of bulk on very wide lots.

The device was more conducive for application over long frontages where large contiguous holdings were available, than it was over the shorter 200 feet wide avenue frontages. The report included two photographs of models demonstrating how proposed averaging of angles of light obstruction would contribute to improved light access to the street. Both of these, however, are of coordinated development of entire blocks of very high coverages. Only on large sites with considerable lineal frontages could full advantage be taken of the averaging principle, with wide openings reaching down low. Even where a large "slot" was provided, there was no guarantee that a subsequent development opposite might not seek to monopolize the "air park" blocking off or reducing light and air to the rest of the area.

Light and air, however, were but one aspect of the total problem. The regulations provided no incentive for increasing open space at ground level, a major objective of subsequent rezoning endeavors. Although the authors of the proposal claimed that a wide variety of buildings would be encouraged, the report's illustrations indicate a new stereotype in which slabs and towers would sit on top of a deep street wall defining podium covering all but a 10 foot wide rear yard. The height of the podium would have been defined by the minimum angle allowed in averaging the angle of light obstruction.

As a result, a major percentage of a building's space would have been on high coverage lower floors with much deep space. The regulations would not have discouraged high density high coverage buildings on small

sites or on interior block sites abutting 60 foot wide streets. Indeed, higher densities could be achieved under the proposed regulations on interior block sites than under the 1916 rules.

The bulk regulations did little for those builders alluded to in the Dowling report, who believed in a continued tendency towards higher tower buildings with less ground coverage, because better rents might be obtained for space with full access to light and air, such as the subsequent Seagram Building or the Chase Manhattan Building in Lower Manhattan were to demonstrate. Investment builders were then not only displeased by the bulk limitations that were to be imposed but also by the type of structure that would have resulted from the regulations. In disagreement, as it was, with a maximum FAR set at 15, their displeasure and opposition were intensified in that a limit of FAR 10 was set in those areas for which plans were being formulated for the bulk of investment building to occur in the ensuing years. A case in point was Park Avenue. Here an FAR of 10 was proposed which, given the width of Park Avenue and the fact that it was in a two times height district, would have meant a very significant reduction in potentially achievable densities. Had it been implemented, the N.Y. Central Railroad's redevelopment intentions would have been imperilled.

It seemed almost as if Robert Moses' prophesy, expressed in a letter to an official of the New York Central Railroad in reply to a protest against the 1944 amendments, was about to come true; namely that if the proposal failed, there would come "a day when you will face a confiscatory change proposed by crackpots and then you will have something to worry about."[15]

The ire of investment builders was further aroused in that FAR 15 was mapped (in the main) in areas where no major redevelopment pressures were to be exerted, e.g. in the area south of Grand Central and along 34th Street. Whereas wide Park Avenue, the location of an upcoming generation of prestige office buildings, was mapped at FAR 10, narrow Madison Avenue, one short block to the west, was mapped at FAR 15. Investment builders were moving into the area west of Rockefeller Center on Sixth Avenue and also east towards Third Avenue where assemblage was easier because of low costs attributable to comparatively lower profitability of residential uses, to decline of other prevailing uses, and prevailing low bulks. Consequently, the potentially achievable bulk and intensity of use differential between the replaced structure and the replacement structure would be much greater than in H. B. & A.'s narrowly defined maximum bulk area, where there already were numerous high density structures of an older vintage, preempting choice sites.

While H. B. & A.'s plan proposals would have severely cut back achievable densities in the Central Commercial Districts, except for some side streets where densities would have actually been increased, they proposed exactly the opposite strategy with respect to residential densities in much of Upper Central Manhattan.[16] Large contiguous areas including both avenues and narrow side streets were proposed for FAR 10 mapping. They included areas bounded by major open spaces, such as Central Park, Riverside Park, the Hudson and the East River.

- From Central Park (Fifth Avenue) three blocks eastward to Lexington Avenue between 59th and 97th Streets, with fingers

stretching north along Central Park to 110th Street and east along the wide crosstown streets.

- From Riverside Drive, two blocks eastward to Broadway between 116th and W 72nd Street
- Along the East River from west of First Avenue between 43rd and 59th Streets
- Central Park South
- Murray Hill, south of Grand Central

According to H. B. & A., FAR 10 corresponded with typical floor area ratios where the district was mapped. FAR 10 mapping was limited entirely to areas of high income, high land values and high bulk.

Although FAR's of 10 or more were indeed typical for many avenue locations, for the many 60 foot wide side streets included in the FAR 10 mapping, an FAR of 3.5 was a more typical value. Under the proposal, achievable bulks for interior residential lots 100 feet in depth on streets 60 feet in width exceeded by a considerable margin those attainable under the 1916 resolution, where an FAR of 7.8 was the maximum achievable density. With an FAR of 10, then, a density differential of 10 - 3.5 = 6.5 was achievable, which was a substantial incentive for redevelopment on side streets.

On March 25, 1952, almost a year after the release of the plan, the first series of five hearings began.

While endorsing the basic concepts, a RPA research group said some provisions of the new plan

> "would enable the building up of Manhattan in an overall pattern of the general density of recent building construction (45-50) which "would overwhelm the street system

> already crowded to the point of congestion, as well as place too great a burden on such municipal services as sewer, water and schools."[17]

C. McKim Norton, president of RPA, pointed out that increased congestion from overbuilding might cause a transportation impasse and said that RPA was proposing a new zoning policy for the dense group of commercial districts that would spread commercial development over a much wider area of the city.

A speaker at the first hearing rejected the plan outright because it would "perpetuate the overcrowding of people in certain sections of the city." The plan

> "appears to be intended to protect the private interests of speculative landlords and not to meet the needs of the city and its millions of people."

The speaker was referring to those areas in upper central Manhattan that had been contiguously mapped at highest densities at FAR 10.[18]

Representatives of the 23rd Street Association said on the other hand, that the provisions on height and floor area of buildings would hamper construction of six-story apartment buildings on typical 100 ft. by 100 ft. lots. Requirements of 30 feet deep rear yards, and other methods of providing light and air accesses, would mean that this type of building would have to be erected on larger lots.

Richard Roth, Sr. the architect, said if adopted, the zoning resolution "will once more become the prototype for future zoning of other cities throughout the United States."

Jenry J. Davenport, Chairman of the Real Estate Board of New York, told the Planning Commission that the Metropolitan Association of Real Estate Boards would have an analysis ready by June 1, 1952.

Additional time for study was asked by representatives of the Citizens Zoning Committee, the Commerce and Industry Association, the Avenue of the Americas Association and the Brooklyn Real Estate Board.[19] In order to discuss the Metropolitan Association of Real Estate Board's special report, the real estate boards requested that a sixth hearing be held in the fall.

When the hearings were resumed on November 7, 1952, opposition to the plan had further strengthened.[20] Representatives of twenty-five organizations spoke during the hearing. Those representing real estate or allied interests rallied around the Metropolitan Association's plea that the existing zoning law be "retained but revised to include a number of desirable features contained in the H. B. & A. report." The Metropolitan Association's point of view was presented by Henry J. Davenport, chairman of its planning committee. He maintained that the H. B. & A. plan was "basically and sadly disappointing." Commissioner Orton rejected the plea for retaining the existing zoning law. "You could no more do that than you could put a jet engine and hydraulic drive into a Model T. Ford." Orton said that the city's 36 year old ordinance had been amended many times. Many major cities were making comprehensive studies leading to rewriting of their own zoning patterns. Davenport responded that the city's law had been the subject of innumerable interpretations and decisions by the Board of Standards and Appeals and the courts. Adoption of a complete new ordinance, he argued, "involves the probable upsetting of this whole body of law" and of settled housing regulations. Davenport proposed that the city use a system of two zoning

maps, one designating use and the other bulk. H. B. & A. had recommended a single map to replace the existing system of three maps, one each for use, height and bulk.

Ira S. Robbins of the Citizens Housing and Planning Council, urged approval of the H. B. & A. rezoning rather than the piecemeal approach sought by real estate interests. He assailed the modifications sought in the Critical Analysis and by Davenport as "compromises", saying that some were impractical, some undesirable and some unconstitutional. At the end of the November 7 hearing, the City Planning Commission reserved decision.

Although Robert Dowling, subsequent to his involvement on the tax committee over two years earlier had written CPC Chairman Finkelstein that the Citizens Zoning Committee would be reactivated to aid the "ultimate adoption of suitable rezoning of the City," it was not until December of 1952 that CZC made its formal reappearance, in time for the final round of hearings to begin in January 1953.[21]

Henry J. Davenport, president of the Home Title Guaranty Company, was elected president, while Robert W. Dowling, president of the City Investing Company, under whose sponsorship the group had been operating informally before, was named treasurer. Dowling, it will be recalled, had been president of the initial organization when it was created in 1944.

> "We are developing a strong, well-informed and permanent organization to lead in the effort for good zoning in the city of New York,"

Davenport said.

On January 12, 1953, almost five years after the study had begun,

the second stage of hearings began with a hearing on the Manhattan maps.[22] Col. John J. Bennett, who had succeeded Finkelstein as chairman of the CPC, stressed that they would be preliminary and informal. The public was to be asked to comment on maps showing actual application of the proposed changes in each of the five boroughs. Expressing general disapproval of the consultant's proposals, Henry J. Davenport, representing both the Real Estate Board of New York, Inc., and the recently reactivated Citizens Zoning Committee, said that public hearings on the zoning district maps were not a proper approach to the subject. Instead, he urged that the Planning Commission initiate a new study by a group consisting of representatives of the Commission, the Borough Presidents, the Commissioner of Housing and Building and the real estate boards and civic organizations of the five boroughs.

The proposal was not heeded.

After conclusion of the borough-wide hearings in June, 1953, no overall action was taken. Several years later, in June, 1960, Robert Wagner was to say that the rezoning plan had been killed by the "Strong fight against the plan made by many groups, including several real estate organizations."

Major buildings continued to be built under the 1916 code. Developers found considerable latitude within the existing rule framework to respond to perceived market demands.

In 1956, the Socony Mobil Building was completed. It occupied the entire block (83,000 sq. ft.) between Lexington Avenue, Third Avenue, 42nd Street and 41st Street just east of Grand Central Station.[23] The

building met a variety of space needs. There were two upward steps cutting back from a 75,000 sq. ft. second floor, the largest floor size in New York City, to an 18,000 sq. ft. tower. Intermediate floors were not so large as the zoning envelope would have permitted. They were cut back to provide better quality space. The availability of an entire block at such a prime location was, however, exceptional. Economic tower floor sizes could be easily provided under the twenty-five percent coverage rules. In the case of the Seagram Building,[24] located on the eastern side of Park Avenue between 52nd and 53rd Street and diagonally across from the Lever Building, completed in 1958, by comparison even more cubage was cut away at the base of the building. Occupying a 60,000 sq. ft. site for which Seagram paid $5,000,000, it could have accommodated a building of about 1,000,000 sq. ft. Initially it had been planned to make full use of the allowed bulk envelope, but then it was decided that a building half the allowed size would better suit the company's purposes. With its relatively small tower floor, sizes of about 12,000 sq. ft., from the 11th to the 38th floors, the Seagram Building remained well within the 25% coverage limitation for towers. Even the 5th to 10th floors - 18,600 sq. ft. and the second to the fourth floors of 28,300 sq. ft. - catered to the need to provide prime peripheral space. 50 percent of the site was left open for a plaza. On three sides the building rose uninterrupted by set backs to the height of 520 feet (38 stories). The tower was set back 90 feet from Park Avenue. The interrupted space of the lower floors of the Seagram Tower puzzled many brokers. While suitable for small tenants it discouraged big leasers. Space in

units as small as 500 to 700 sq. ft. was offered to prestige tenants.

Had the projected Astor Plaza to the north of the Seagram Site been built, the intersection of Park Avenue and Fifty-Third Street would have had a clustering of office tower plazas. This, however, would have cancelled the intended effect of a spatially defined plaza. Later, in the 60's, Richard Roth, the architect for 345 Park Avenue, provided spatial closure to the south by letting a 6 story portion of 345 Park Avenue reach to the Avenue's lot line. Apparently the architects had wished to place the bulk of the building close to the Park Avenue lot line.[25] Such action would have had a number of beneficial effects in addition to providing more effective spatial closure. Open space, a plaza, would have been provided on narrow Lexington Avenue which is starved for open space. Views of and outlook from both Seagram's and 345 Park Avenue would have benefited from such staggering. Unfortunately, the client insisted on the Park Avenue Plaza, because it was considered more prestige enhancing. Vincent Scully, in asserting that Lever House had cut the first serious hole in Park Avenue as a street and had created its own unusable plaza, called attention to Seagram's "fine entrance plaza" and the positioning of the tower's slab parallel to the avenue rather than at a right angle to it as in the case of Lever Building.

The third post war addition to Rockefeller Center, the forty seven story Time and Life Building to the west of Sixth Avenue between W 50th and W 51st Street, emphasized the demand for large identical tower floors.[26] At 32,000 sq. ft. they were the largest tower floors to have been built in Manhattan by 1959. Separated from the Rockefeller

Center Superblock by Sixth Avenue, the twenty-five percent coverage limitation for towers posed a problem that was met by adding to the tower space (12,000 sq. ft.) equal to twenty five percent of the plot of the adjacent Roxy Theater, which had been acquired by Rockefeller Center. In that it rose from an avenue level plaza without setbacks (587 ft) and that all cubage allowed by the bulk envelope at the base of the building was cut away, the structure resembled its predecessor, the Time and Life Building of 1936. Whereas Seagrams and Lever House had catered solely to prime peripheral space, Time and Life met the need for large amounts of prime peripheral space backed up by secondary space on the same floor. The building was considered to be a beachhead, opening up development west of Rockefeller Center proper for prestige buildings.

The client for the Union Carbide Building on the block bounded by Madison Avenue and Park Avenue, 47th and 48th Street, the site of the former Marguery Hotel, had requested 60 percent peripheral working space.[27] The building was primarily to serve as a national headquarters and window space was needed for top executives. Three alternatives were studied by Skidmore, Owings and Merril, the architects:

- A ziggurat massing which would have covered the entire plot in its lower stories, with the upper stories stepped back in accordance with the zoning resolution. It provided much second rate deep space. The repeated setbacks, entailing much lineal footage of cornices and flashing, were uneconomical to build. The many floor sizes were less desirable.
- A tower located at Madison Avenue so as to avoid placing columns and footers among the N. Y. Central tracks passing underneath at the

Park Avenue end of the site. A lower appendage would have fronted on Park Avenue.

- Ultimately, it was decided, however, to take advantage of the prime Park Avenue location and place the tower portion on Park Avenue over the tracks with the lower part of the building fronting on Madison Avenue. The 52 tower floors at 17,500 sq. ft. each were slightly smaller than the lower floors of the nearby Socony-Mobil Building but almost 50 percent smaller than those of the Time and Life building completed the year before.

With a twenty-five percent coverage tower, it was possible to provide 64% peripheral space. The twelve story lower part of the building served to secure the tower's light and outlook towards Madison Avenue. 200,000 sq. ft. of secondary space was contained primarily in 12 annex floors each with 37,000 sq. ft. The building contained 1.5 million gross sq. ft. of space, 1.16 million net.

The building provided numerous amenities at ground level. Forty four percent of the 80,000 sq. ft. site was turned over to pedestrians. A plaza along the Park Avenue frontage was provided and wider sidewalks along Forty Seventh and Forty Eighth Street. A covered pedestrian arcade bisected the block between tower and annex. Sidewalks were arcaded. One year later, in 1961, another major building was completed that took advantage of the privilege to penetrate the sky exposure plane and also cut away cubage at the base to provide superior rental space.

In 1955, Chase Manhattan had decided to consolidate its Lower Manhattan operations. William Zeckendorf, in a series of complicated transactions, rather like a game of musical chairs, assembled two blocks

in the heart of the financial district.[28] Chase desired big floors but this conflicted with the zoning provision that towers of unlimited height must not occupy more than 25 percent of the plot. In addition, Chase desired column free space to ensure flexibility of floor layout, but the typical zoning-induced step-back militated against wide spans.

Initially a building was contemplated that would have covered the entire block from Cedar to Liberty Street between Nassau and William Street. With usual zoning setbacks the envelope would have allowed for about 1,250,000 sq. ft. of useable space.[29] Skidmore, Owings and Merrill, the architects, experimented with a variety of bulk configurations. They found by creating a superblock through inclusion of the adjacent block to the south, bounded by Pine and Cedar Street, Nassau and William Street, a tower building containing 1.7 million sq. ft. could be built. The architects found that an economical 60 story tower with five below grade levels could be developed on the combined site if a 30% coverage tower were allowed instead of the usual 25%. In return for the city's agreement to close Cedar Street and allow 30% unlimited height coverage, the Chase Manhattan Bank agreed:

- to provide a 98,000 sq. ft. plaza above the below grade levels;
- to cede to the city a 15 ft. strip on three sides of the superblock, eight feet on the fourth, to eliminate a jog and line up with Chase's old building;
- to renovate existing utilities;
- to pay the city $100,000;
- to provide an arcade along Pine Street with the old Chase Manhattan Building that was to be kept, to allow the new setback sidewalk to continue through.

Total size of the building is 2,400,000 gross sq. ft. with 1,800,000 sq. ft. in the 60 story tower (30,000 sq. ft. per floor) and one fourth of the space, 600,000 sq. ft. on the 5 floors below the plaza. The plaza is a few steps up from the levels of Nassau and Pine Streets, but as the site slopes to the southeast, the plaza is parapeted and raised one story at the southeast corner. The main public banking floor was the first level below the plaza and the slope of the site was used to provide sidewalk level entrances from the downhill side. Natural light to the main banking floor was secured through sunken gardens in the center of the main plaza.

In the decade from 1950 to 1960, then, numerous freestanding towers were erected that cut all or most of the cubage away from the base of the tower. The prediction at the beginning of the decade contained in the report of the Committee headed by Robert Dowling, namely that:

> "Some builders believe that the tendency towards higher tower buildings with less ground coverage will continue because better rents may be obtained from space with full access to light and air",

had been fulfilled.[30] These buildings had FARs far in excess of the maximum density that the H. B. & A. plan would have allowed. Moreover, many of them were situated in areas where H. B. & A. had specified a FAR of 10.

The initial framers of the resolution had not envisaged that utilization of the twenty-five percent coverage provision, allowing unlimited height and thus unlimited density, would substantially contribute to raising an area's density level. It will be recalled that in the '20s, the great skyscraper debate was not triggered by the

results of excessive usage of the 25% provision, but by the great heights - and thus densities - that could be achieved when the very steep recession planes of the two times and two and a half times districts were applied in conjunction with the provision that allowed street walls to rise to twice or two and a half times the width of the street or avenue. I argue that even when the greater percentage of a building's space began to be in twenty-five percent towers at the beginning of the 30's, the impact of density attributable to the utilization of the 25% coverage provision on the density levels of an area was not so acute as it was to become later, between 1950 and 1960, because of the non-availability of suitably large sites at the hubs of congestion where high densities were a critical issue. Rather such 25% coverage provision towers tended to be located at the extreme periphery of hubs of development, e.g. Rockefeller Center's RCA building, or entirely separated from them as was the case with the Empire State Building or the McGraw Hill Building, west of Eighth Avenue. Although these buildings individually had admittedly high densities, the density of the overall area in which they were located remained far below those at the hubs of developmental activity, because the towers were few and far between.

In the post-war period, for a number of years, it was not to be the twenty-five percent coverage provision that was to significantly contribute to raising density levels to critical levels but rather the newly attained ability -- with air conditioning and fluorescent lighting -- to utilize that portion of the 1916 rules bulk envelope, that in the preceding period had begun to be discarded because of its

inferior environmental attributes. As, however, a combination of outlook view, a building's setting, as well as a prime location, began to be increasingly valued, as national headquarters of national and international corporations were drawn to the city, specifications for a new type of prototypical building began to be developed and implemented. Key segments of real estate saw as their task the creation of buildings that took a range of factors into account:

- a prime location;
- large, uniform, flexible floors with a significant percentage of peripheral space;
- the creation of a "whole new environment", through plazas and air parks;
- provision of much ground level space so as to increase the distance to other buildings and thoroughfares and thus also enhance the desirability of lower floors of office structures that had hitherto faced onto narrow rear courts or onto canyon-like streets;
- by securing outlook and increasing privacy through reducing mutual visual intrusion by increased spacing between buildings;
- by reducing noise through setting back from the lot line, although this had become less critical than in earlier times because of the non-operable windows of the curtain-walled building;
- significant amounts of ground level space served also to provide a prestige enhancing setting, a key attribute for a corporation headquarters building;
- the economics of construction technology militated increasingly in favor of the straight-up building without setbacks.

Developers were able to secure these attributes under the geometric rules of 1916. Fulfillment of these specifications would have been impossible under the geometric rules proposed by Harrison, Ballard and Allen. The opposition of the key controlling segments of real estate as represented by Dowling and Davenport to the measures is attributable to this fact.

Only very few of the major investment builders could hope to produce the desired prototype office structure, because of the paucity of sites that would allow for a 25% coverage tower of economical proportions. By the end of the decade, these few limited opportunities had mostly been availed of. A twenty-five percent tower on a small site would have been too slender. The ratio of building surface to enclosed space would be too great. The amount of space taken up by the core on each floor would have been too great in proportion to the remainder of the space available for rent; unless the core was itself small, in which case the building would have had to have fewer stories, and thus a much lower density than the prescribed, postulated FAR of 18 to 20. While the 25% coverage provision had enhanced the competitive position of major developers as providers of prime space, they increasingly had a stake in a relaxation of the 25% coverage provision to allow for towers on smaller sites.

With only a limited amount of opportunities to develop towers, either freestanding or on base podiums, and with the previously described technological advances, the "baby skyscraper" on a 100' x 100' plot with its lower 11 to 12 stories adhering to the plot line to achieve maximum permissible bulk became the developer's usual alternative. Such structures could fill in the interstices in the pattern of built form

that had been left in the previous cycle of building, in large part to ensure a minimum amount of amenity in terms of light and air. Such small and medium sized high density structures posed a threat in a number of ways. In that they were not demanding in terms of lot configurations, sizes or locations, their indiscriminate construction could impair light, air, outlook of existing older structures. Moreover, they could also hope to "cash in" on the improved environment resulting from the new generation of large structures with their plazas covering up to 75 percent of the plot and their "air parks;" i.e. they could directly benefit from improved light, air, and outlook if they were located next to or close to such a plaza or airpark. They could also benefit from the enhanced prestige of the area attributable to the new major structure, as well as from the utility of proximity to the tenants attracted to the new major structure. They, in turn, would, however, typically not have contributed to the enhancement of the environment. Such structures would, to some extent, at times to a considerable extent, be able to undermine the rental position of such major neighborhood enhancing structures. Inexpensively built space could be thrown onto the market. Thus, towards the end of the 1950s, key realtors as represented by Dowling, had two major emerging interests:

- They were concerned, in the face of an anticipated continued demand for space, that measures be adopted that would allow tower type structures of similar floor-plan dimensions as the Chase Manhattan, the Pan-Am, and Union Carbide Buildings, but on smaller sites.
- They were concerned that measures be adopted that would reduce the comparative profitability of redeveloping smaller sites because these

undermined rental levels and also, to a certain degree, impaired the accomplishments of the major structure.

Post-war buildings completed by Spring 1957 had contained an average of 280,000 sq. ft. of rentable area. Those planned in early 1957 had an average of 500,000 sq. ft. By early 1957, 40,000,000 sq. ft. had been added or was about to be added to New York's office space since 1945. This represented a 40 percent increase of the city's office space in little more than a decade since 1945. It was more office space than the total in any other U.S. city. It equaled all the new office buildings in all the rest of the country put together and then half as much again.

The first part of this chapter has shown how the needs of the investing building community were not met by Harrison, Ballard and Allen and how, in consequence, the proposal was resisted.

The second part of the chapter has shown how the investing building community still continued to be able to meet the new contingencies in the markets of space by exploiting the 25% tower coverage provisions of the 1916 Code, and how as sufficiently large sites suitably located began to be exhausted, renewed pressure was brought to bear to change the 1916 Code.

Chapter 5

The Enactment of the
Comprehensive Zoning Amendment in 1960
and the Emergence of Incentive Zoning

This chapter describes the nature of the process leading to the enactment of the 1960 Code. It identifies issues at stake, the major actors and the key decision points in the process.

In 1953, Wagner had successfully run for the mayoralty on the Democratic ticket, as he did again in 1957 and in 1961. Wagner, in his role as Chairman of the CPC, had initiated the ill-fated rezoning attempt which, by 1953, had lost all momentum. Late in 1955, still committed to rezoning, he appointed James Felt to lead the City Planning Commission. Robert Dowling considered James Felt "a close and affectionate friend."[1] As a specialist for assembling land for large private developments, and in relocating evicted tenants, Felt had assembled the land for the Metropolitan Life Insurance Co.'s Stuyvesant Town and Peter Cooper Village, both developments in which Dowling had played a key role. Felt had had his own real estate firm since 1928 and had been active in the leadership of the Real Estate Board of New York.[2]

Shortly after taking up his post as chairman on January 1, 1956, James Felt said that New York City had reached a point of development where complete rezoning could not be put off much longer.[3] He described the existing laws as outmoded and altogether inadequate, and compared

the zoning system to a patched up old automobile that keeps running, but hardly performs the task required of it.

> "Our zoning task now would be simpler if there had been an overall rezoning of New York City ten or fifteen years ago; if we fail to produce an up to date plan now, think how difficult zoning will be fifteen years from now,"

he said in an appearance on television in July 1956.[4]

In expressing his determination to get a new zoning resolution -- "if it is the last thing that I shall do with the City Planning Commission, we will have a new zoning resolution" -- he hastened to assure his listeners that no radical changes would be made and that the plan of New York as it was, would not be scrapped.

On August 30, 1956, the Board of Estimate approved $150,000 to contract the architectural firm of Voorhees, Walker, Smith and Smith, the firm that had played a key role in the opposition to the 1944 amendments, to produce a new rezoning proposal.

In a letter to Felt, Robert Moses denounced the projected rezoning "as a revolutionary scheme".[5] In alluding to his own experience and that of H. B. & A., he wrote:

> "There are plenty of worthy limited objectives to pursue without heading straight for the millenium. We have wasted enough money on previous panaceas of this kind."

In stating that the aim of the proposed study appeared to be a reclassification of every one of the 700,000 or more pieces of property in the city on entirely new and untried theories, he said:

> "I'm for making the smaller less dramatic advances scorned by the demon planners."

At the beginning of March, 1958, almost two years later, Felt told a newspaper reporter that he would receive the report and draft of a new

zoning law from VWSS by the following month, but that he expected it would take "at least one year until the Board of Estimate adopted a new zoning resolution." This time period would be needed for "intensive review and study" by city officials, real estate interests, builders and other groups.[6] Felt stressed that whatever resolution emerged his commission would be "realistic" in dealing with conditions in a city as largely built up as New York.

In voicing the belief that the forthcoming report would fare better than the zoning study made for the city in 1950 by Harrison, Ballard and Allen, he said:

> "We cannot, in ivory towered or starry eyed fashion, try to remake the city without a deep and compelling awareness of what we have."

He continued:

> "I would rather have a zoning resolution become law that is 85 percent perfect than a 100 percent resolution that winds up on a library shelf."

Nevertheless, he would resist "watering down" what might make the new zoning proposals ineffective, "...we will keep at it until we get a new zoning law, if it takes one year or five years."

Although there was close collaboration between CPC and VWS&S, responsibility for the report lay ostensibly with the consultants. This would enable the Planning Commission to disassociate itself from any particular part of the consultants' recommendations meeting with opposition, without loss of face. It would also facilitate flexibility in multi-interest bargaining.

It was not until February 16, 1959, however, that the first draft of the new zoning resolution was made public by the CPC.[6] Felt said he

expected that the resolution, with possible changes from the present draft, would become law before the end of 1959. But because it cannot be retroactive, no one should expect it to work an overnight miracle, he declared.

> "It may be five or ten years before we can see, even with a little squinting, a physic-l change through new construction."

The Commission said it expected the new zoning

- to limit density of office construction in the Grand Central area;
- to provide more variety in commercial structures with fewer of the "wedding cake" type by allowing towers to be built up to forty percent of a site against the twenty-five percent allowed under the 1916 rules. Such towers need not have any setbacks, otherwise required, nor be limited by the sky exposure plane provided they were placed no nearer to a narrow street than one-third of the tower width which faced the (50 feet) street and no nearer to a wide street than one-fourth of the tower's width. This would be a greater incentive for builders to build towers, as the reduction of space for stairwells, air-conditioning and elevator shafts would be proportionately less than in a 25% tower.

Perry Coke Smith, senior partner of Voorhees, Walker, Smith and Smith in charge of the study, noted that the new recommendations went further than those of the 1950 report of H. B. & A. in that they encouraged more plaza and mall space inside mapped building lines by allowing three additional square feet of floor space for each square foot of open space in excess of a required 30 feet rear yard. A plaza of 10,000 sq. ft. would allow a developer to receive an additional

30,000 sq. ft. of floor space on the rest of his plot. V. W. S. & S. anticipated only a slight increase in maximum permitted bulk resulting from this bonus which, in their opinion, would be well justified by the benefits of increased open space. The device was to be also applied to the highest density residential districts where it was to encourage the setting back of buildings from the street line in order to bring more light and air into streets surrounded by tall buildings.

Planning Commissioner Francis J. Bloustein stressed that the new regulations would permit buildings rising from wide plazas, such as the Seagram Building, without sacrifice of rental area.

In announcing the proposal, Felt admitted that:

> "Some people won't like all the proposed new provisions, especially those that will end the loading of a lot to the last possible cubic foot of construction,"

but the intention was to present a resolution that would result in a better city in which real estate values would be sounder and higher. Under the proposal, new apartment construction would not repeat the "monotony of block after block of unbroken masonry, like along much of Park Avenue and the Bronx's Concourse."

In addition, developers were offered two bulk envelope alternatives that more closely resembled the envelopes they were familiar with.[7]

Options offered by the interchangeable regulations included utilization of

- tower provisions and the bonus increments
- the standard setback and street wall regulations in conjunction with the tower provisions;

- alternate sky exposure plane and tower regulations.

The floor area ratio was a major device in the proposed rezoning.[8]

The major objection of real estate interests to previous rezoning proposals had been the limitations placed on highest density commercial development. The issue was to continue to remain critical in gaining support for the VWS&S proposal.

In that large contiguous areas, containing narrow side streets and wide avenues alike were mapped for FAR 10, the pattern for highest density mapping resembled that proposed earlier by H. B. & A. A base FAR of 10 was proposed for

- all of the Upper East Side from 61st Street to 96th Street between Central Park (Fifth Avenue) to east of Lexington Avenue;
- the Murray Hill area, south of Grand Central between 35th and 39th Streets, Madison and Third Avenue;
- the West Side from the Hudson to east of Broadway and between 72nd and 96th Street.

Whereas the regulations proposed by Harrison, Ballard and Allen had not catered to the needs of those builders who believed that the tendency towards tower buildings with less ground coverage would continue, the rules proposed by VWS&S recognized the builders' need to be able to erect towers on smaller sites than hitherto possible. There were also significant differences in the amount of area and location that VWS&S and H. B. & A. had mapped at FAR 15 for highest density commercial development.

- Whereas H. B. & A.'s most easterly boundary had run between Lexington Avenue and Park Avenue between 40th and 46th Streets, V. W. S. & S.

extended FAR 15 approximately two blocks to the east, to include the eastern avenue frontage of Third Avenue.

- Whereas H. B. & A. had proposed an FAR of 10 for Park Avenue, V. W. S. & S. proposed FAR 15 as far north as 60th Street.
- Whereas H. B. & A. had proposed FAR 15 as far south as 23rd Street on Fifth Avenue and a two to four block wide swath along 34th Street from east of Madison Avenue to Pennsylvania Station west of Seventh Avenue, V. W. S. & S. did not extend FAR 15 south of line drawn along 40th and 38th Street.
- Whereas north of 48th Street, H. B. &. A. had mapped FAR 15 Madison Avenue as far north as 57th Street and Fifth Avenue to 48th Street, V. W. S. & S. mapped both Madison Avenue and Fifth Avenue to 61st Street, to Central Park.
- Whereas H. B. & A. had thought that the "extension of the highly concentrated area with many high bulk buildings over a broader area than it then affected, was undesirable and not likely to occur over a wide area," V. W. S. & S. argued that the proposed level of building bulk for the FAR 15 districts was

> "designed to encourage more spreading out of intensive office development over a wider area of the Central Bsuiness District and thus relieve the pressure on already overburdened transportation facilities..."[9]

On February 22, 1959, Felt was still thinking in terms of a fall approval of the zoning measure with whatever modifications or changes the City Planning saw fit to recommend. Taking part in a discussion broadcast called "Let's find out," he said that Mayor Wagner was very anxious to see that a new modern zoning resolution was put into effect.[10]

On March 5, 1959, at a luncheon given in his honor by business and professional groups representing the city's real estate men, architects and engineers, Harris H. Murdock, chairman of the Board of Standards and Appeals, declared that any new zoning worked out for the city must not increase the bulk of large buildings.[11]

"No more dark canyons are wanted," he said in noting that many high buildings had been constructed within the present zoning envelope "without blocking out the sun and the heavens. Let us do nothing to further restrict air and sunlight." In calling attention to a tendency toward too restrictive zoning, he said a zoning resolution should be clear, concise and its provisions "should be stated in simple terms. And a zoning law should not be complicated by setting up too many types of districts," he said.

On March 22, 1959, Felt, in announcing that the commission would have its own official rezoning recommendations ready for formal public hearings in the fall, said that he expected that informal hearings to be held in April and May would aid the planning agency in its evaluation of the V. W. S. & S. recommendation.[12]

Residential real estate interests were particularly perturbed at the extent of the cutbacks of achievable densities. On April 6, 1959, speaking at a luncheon of the Real Estate Board, David Rose, a leading developer of apartment buildings, cited the effects of the proposal on the 31,600 sq. ft. plot at 850 Third Avenue between 50th and 51st Streets.[13] Under the 1916 rules, a building on that site might contain 800,000 sq. ft. of gross floor area. Under the proposed zoning law the permissible area would be reduced to 160,000 sq. ft. or one fifth. Another instance mentioned was the corner of Madison

Avenue and 79th Street. There a plot of 15,000 sq. ft. produced 200,000 sq. ft. of interior floor area. Under the proposal, this would be cut to 154,000 sq. ft. but only by virtue of the fact that the site was mapped for an FAR of 10, the highest residential density. If the plot were in an R 8 zone with an FAR of 4.5, the same plot would produce only 72,000 sq. ft. or less than one half of the potential under 1916 rules. Rose said time was needed to discuss the pros and cons of every aspect of the proposed ordinance. He warned against throwing out the baby with the bath water in scrapping the existing code.

Another example of the cutbacks was an apartment house in the east sixties, completed in late 1959, which had a floor area ratio of 18. The building was twenty stories high and occupied an entire block front. Under the proposed code, the bulk of a new building could only have been one quarter of that of the apartment building. The FAR proposed for that area was 4.5.

Some builders warned that enactment of the resolution would bring with it a drop in land values because of the reduced productivity of the site. A decline in land values and a reduced productivity of buildings that could be erected under the new code would ultimately bring down the total value of the city's ratables with a consequential loss of tax revenues from real estate.

On April 12, the eve of the hearing, Manhattan Borough President Hulan Jack made it known that he was unequivocally opposed to the rezoning of the city as proposed, because "it would be so destructive of land values that private investment in Manhattan real estate

and the rebuilding of outworn areas under it would come to a dead stop."[13] Picturing the failure "of hundreds of contracting firms, widespread unemployment and distress among industries that supply and serve the construction business," he predicted that other members of the Board of Estimate would join him in opposition once they became aware of the genuinely catastrophic "loss in taxes that would hit the city." Conceding that the 1916 ordinance needed to be revised, Jack appointed a 10 man Special Advisory Committee on Zoning.

At the hearings held on April 13 and 14, opposition continued.[14] The Executive Secretary of the Building Industry League, Inc. whose members were builders, architects and building supply concerns, representing average, small and middle class builders, denounced as "revolutionary the part of the proposal setting new limits to the bulk and density of buildings on specified ground areas." He said it would reduce bulk from 50 to 75 percent in some instances and would preclude "economically feasible building." This aspect of the proposal would bring about economic chaos in the building and real estate fields. The representative of the United Builders Association raised a number of criticisms as to the possible effect of the proposals on rents, on the small builder and property owner, and on projects to alter existing structures. Several speakers asked for more time to study the proposals.

A statement from the civic design committee of the New York chapter of the American Institute of Architects suggested that floor area and bulk controls would require reexamination and revision.

In acknowledging that some were bound to be hurt, David Tishman,

chairman of the Tishman Realty and Construction Corporation, one of the city's largest investment builders, confidently predicted that

> "we'll come up with suggestions acceptable to the City Planning Commission" ... "the test is what is good for our city as a whole."

Erwin Wolfson, who was planning erection of a 55 story office tower astride Grand Central Station, said:

> "While we don't know what the final new zoning ordinance will be, we are going ahead next year with construction based on a design which we think will be in complete conformity with the new ordinance."

The planned structure was a 25 percent coverage tower on a very large site.

Felt responded to the numerous criticisms in a variety of ways:

- Speaking at the April 6 luncheon, he told the realty men that the zoning might be subjected to many changes before it would be formally presented to the Board of Estimate for approval.[15] He emphasized that at that stage, it was strictly a proposal and nothing more and urged organizations as well as individuals to contribute as much as possible to evaluation of the proposal, so that it might be amended and molded before it reached the stage of public hearings.
- Although bulk would be restricted in many cases, the new code would not make future construction infeasible, but instead of permitting the builder to reap his yield quickly, it would spread the gain out over a longer period because the rezoning could be expected to prolong the economic life of the property. Because the long range productivity of new buildings would not be impaired, land values would not be impaired by the code. The city's tax income would not be affected because a building would retain its higher value and consequently,

its assessed valuation longer than it did then.

- With regard to specific instances as cited by David Rose, where bulk would be reduced drastically, he pointed out that such disparities were merely flaws in the mapping of a particular block or area, not defects of the code in general. Such disputes could be easily resolved without amending the code's concept.

Rose, in reply, said that mapping was the heart of the zoning ordinance. The remapping idea reminded him of the story about an American on his first visit to Switzerland. Asked his opinion of that country, the American remarked: "Take away the Alps and what have you got." However, while considering an 18 to 1 FAR, as in the case of a new apartment building on the East Sixties, much too great for a residential building, the CPC held it not necessarily too great for an office building, provided that the structure met specific requirements on the arrangement of its space on its lot.

In approving the proposed plan in principle, Felt conceded that there were many details in it that he, as a practical real estate man, did not accept in the form in which they were then proposed. Therefore he urged the Real Estate Board to marshall all critics of the code into one committee so that the Planning Commission would have the best opportunity to study the protests. He compared the old code to a Model T Ford which, held together with baling wire, might still provide transportation of a sort, but hardly could keep up with the demands made upon a modern car.

- Felt predicted that a building boom, rather than a recession as Hulan Jack had predicted, would follow the rezoning. He predicted the building

spurt would be particularly heavy during a year of grace on new construction which he had had incorporated in the proposal.

- Felt said he was disturbed

> "because critics were deriding proposals without waiting to see the final plan to be brought out by the Commission."
> "I do not see how any one can visualize what the final rezoning plan will be until we bring it out, with the certain modifications....We don't please everyone, of course, but we are seeking something based not just on short-term profits, but more or less long term gains for the city."

In response to Hulan Jack's accusation he said that "he yielded to no one" in his love for New York City and Manhattan, and would never recommend any zone change or policy that would jeopardize the borough's economic growth.

Robert Dowling, president of the City Investing Co., who had organized the forces opposing the Moses sponsored amendment in 1944, had made no bones about his disenchantment with H. B. & A.'s proposals in 1950. Once again, he was to assume an active leadership role in the zoning struggle, but this time he was to throw his weight solidly behind Chairman Felt, whom he considered "a close and affectionate friend." Dowling was more than willing to contribute his time and influence to advocating the rezoning proposals of Felt.[16]

On May 6, 1959, the formation of a Citizen's Committee for Modern Zoning was announced. In calling the 1916 law "antiquated," Dowling, in his capacity as co-chairman, said it did not intend to let this issue die as had happened so often in the past. In a statement issued on behalf of the committee, he said that the group

> "feels deeply that under the careful consideration and direction of James Felt and the City Planning Commission, a workable, useful and efficient new city will emerge."

The intended purpose of the CMZ was to provide an informal means of communication to the financial and business communities of the city in order to be able to promote

> "certain kinds of stands, certain arguments that the commission could not take itself. With access to the "inner circles" of lots of interests and groups, it was possible to put certain views in the right ears without seeming to push....It was a way of getting certain influential types involved...men whose voices would be listened to, if you could convince them to speak and by putting a man's name on a letterhead, you give him a psychological commitment to what that letterhead represents.
>
> simply, many realtors could be persuaded by David Rockefeller, Tishman, Dowling, so forth, in a way that they could not be persuaded by the Planning Commission staff. And the same was true of the big builders."[17]

On September 16, 1959, at a luncheon meeting of the Twenty-Third Street Association representing an area spanning Manhattan from 17th to 28th Street between the two rivers, attention was called to the variety of residential, commercial and manufacturing building, old and new, within that district's borders. As a result, few areas of the city would have a higher percentage of non-conformity to the zoning regulations.[18]

On November 30, 1959, the Metropolitan Board of Real Estate Associations released the results of a seven month study of the V. W. S. & S. proposal.[19] Many points raised earlier were reiterated.

The zoning plan would

- diminish greatly the value of many small parcels of real estate,
- require much higher rents in new buildings,
- mean less income for the buildings because of the limitations in their size,

- mean less total real estate taxes but higher real estate tax rates overall, including the taxes on small homes.

Mr. Barrera, chairman of the zoning committee that drew up the report, in conceding that "undoubtedly something must be done to prevent areas of the city from becoming congested to the point where strangulation sets in," said this could be accomplished under the 1916 rules by changing the height, area, and use allowances of the particular districts giving concern.

> "The drastic and wholesale changes sought by the proponents of the proposal should be accomplished through urban development and not through zoning," he continued.

He urged the city planners

> "not to subscribe to the notion that they can foresee the total requirements of this varied city over the next fifteen years, not to speak of a permanent plan setting a limit on the population."

On the next day, on December 1, 1959, Felt, by way of response to MREBA's rejection of the zoning proposal, said many of the real estate men were shortsighted in regard to the best interests of the city and of their profession. In assuring his former colleagues in the realty field of his warm regard, he described the critics as

> "the professional heirs of those who bitterly opposed the adoption of the 1916 zoning resolution....They predicted that grass would grow in the streets and that building would come to a halt. The 1916 zoning ordinance, as every one knows, was followed by the greatest building boom in New York City and unheralded prosperity in the real estate industry. I have no doubt that adoption of the New Zoning resolution will benefit not only the people of the city in general, but those involved in the field of real estate as well. I am sure that after the passage of the new zoning resolution, the real estate industry will acknowledge its merits, just as they now embrace the 1916 resolution which their fathers endeavored to obstruct."[20]

Felt, in expressing his confidence that a new zoning law would be enacted, despite the opposition, said that the proposed resolution would "reflect the commission's careful consideration of the constructive criticism" of the real estate, civic, architectural and business organizations.

> "I feel certain that many of the points raised by the Metropolitan Association of Real Estate Boards will no longer be applicable."[21]

Within two weeks of the release of the MREBA's critical analysis, a report prepared by the zoning subcommittee of the New York chapter of the American Institute of Architects was released.[22] The New York Chapter, representing Manhattan, was one of the five borough chapters that were members of the Architects Council of New York City. In enthusiastically endorsing the proposed zoning resolution, the Council's president, L. Bancel La Farge, in referring to "a lot of twaddle" that was rampant, that a new zoning resolution replacing the existing obsolescent code would be "a straight jacket for the city," said "Civilization progresses by means of intelligent regulation of the individual when he comes in conflict with the public good."

The interests of major mortgage lending institutions were represented on the Manhattan chapter's subcommittee by its head, G. Harmon Gurney, chief architect for housing for the New York Life Insurance Company, and by Anthony J. Daidones, chief architect for the division of mortgage banking and housing of the Controllers. The subsequent head of the Board of Standards and Appeals, M. Milton Glass, also served on the committee.

The most important of the suggested changes, the architects felt,

was the increased bonus for plazas and bonuses for arcades for office buildings and large apartment houses. Increases in plaza bonuses were proposed because, as the committee argued, "detailed studies of zoning districts to which the bonus applied showed that a bonus of three additional feet of floor space for each square foot of the plaza would" not be sufficient incentive to the investment builder to forego the high rentals for street level space. Moreover, the smaller plazas of Canada House and the Corning Glass Building on Fifth Avenue indicated that it was "worth a great deal to the public to enjoy open space at street level." One of the examples for bulk modification cited in the report is as follows. On a 200 by 100 foot block front avenue plot a building with a bulk of 272,000 sq. ft. could be built under the 1916 rules without utilizing the 25% tower coverage provision. Under the V. W. S. & S. proposal, bulk would be cut to 200,000 sq. ft. However, the builder would receive a bonus if he put an open plaza around the building. A 20 foot deep plaza on three sides of the building would bring the bulk up to 221,600 sq. ft. at a one to three award ratio. With increased bonuses for plazas - 1 : 10 instead of 1 : 3, the provision of bonuses for arcades, colonnades and other open space at ground level, the bulk of the building could be raised by 20% to 240,000 sq. ft. instead of 221,600 proposed by V. W. S. & S. It was recommended that the bonus be expressed in terms of FAR for the district, thus each three square feet of plaza should count as two additional square feet of "effective lot area" for the purpose of calculating floor area allowed. In a district with an FAR of 15, this would be equivalent to a bonus of ten square feet of floor area for each square foot of plaza;

in an FAR 10 district, it would be equivalent to a bonus of 6 $^{2/3}$ sq. ft.

A variety of additional bonusable amenities were proposed:

- arcades or colonnades at least 60 feet wide, open at least 50% of their perimeter with 12 feet clear soffits;
- sideyards at least 30 seet wide;
- rear yards connected to the street by such side yards or colonnades;
- interior courts similarly connected to the street, but meeting special requirements on size and area in relation to the surrounding walls.

All of these spaces would have to be accessible at all times to the public and would have to be properly lighted. In this manner, all open space included would have been eligible for a bonus. This would have been conducive to high coverage, high density structures, in contrast to the taller, lower coverage structures encouraged through a combination of bonusable open space with a substantial percentage of required open space. The bonus and amenity schedule would have made it possible for sufficient amenities to be provided on smaller and medium sized lots for the full 20 percent bulk increment to be earned. These proposals would have especially benefited the medium sized and smaller sized site developers, in that the space-consuming required open space would have been eliminated and all open space, covered open space included, would have been eligible for a bonus. It was recommended that in order to prevent FARs becoming too large, as a result of the additional bonusable spaces, the increase in FAR be limited to 20 percent of the basic FAR.

Analysis, by the committee, of the 40% tower provision had shown

that "it was of no practical benefit to the small lot. To improve the usefulness of smaller lots and to encourage the visual opening up of the city "for the pedestrian," it was proposed to allow increased tower coverage up to 50 percent for lots of 10,000 sq. ft. or less.

In the high density residential and commercial districts of Manhattan, the limit of a zoning district parallel to the north-south avenues should extend 150 feet back from the avenue lot line instead of 100 feet as proposed because a lot only 100 feet deep was not very practical for development.

No 60 foot street should be mapped by R 9 (FAR 10) because permitted bulk would be greater under the proposed regulations than under the prevailing regulations. As many east-west streets as possible on the upper East Side should be mapped R 7 or if necessary R 8 (FAR 4.5) to discourage new building, except when large sites for large buildings can be assembled in order to preserve the residential character and scale of the neighborhood, to allow profitable conversion of private residences into apartments, to ensure continued access of sunlight to all residential buildings.

However, as high buildings on the north-south avenues did not have the same effect of shutting off the sun from neighboring narrow side streets, and the "residential scale such as encountered on side streets is already lost," avenues might be mapped at FAR 10.

The committee also found that the gap in scale of available districts between R 9 FAR 10 and the next highest R8 FAR 4.5 - made for inflexibility in the mapping of the city. Therefore they proposed that an intermediate district be designated or, alternately, that the

requirements of the R5, R6, R7 districts be revised upward to fill the gap.

The adoption of the AIA proposals with respect to bonusable amenities and their award rates would have had far reaching effects on urban form. First, as all open space would have been bonusable, i.e. there would have been no non-bonusable required open space, bulk increments could be won with far less open space provided. This, in turn, would have made it possible to have greater coverage on smaller sites than were subsequently to be typical for structures utilizing the plaza bonus. Moreover, covered space was to be awarded a relatively higher bonus rate than was subsequently to be the case.

The effect of these measures would have been, had they been implemented, to:

- Make lower and squatter buildings possible.
- Obviate the necessity to assemble large sites in order to avail oneself of the full plaza bonus, later a major factor.

The incentive system would have made it possible to develop smaller and medium sized sites, while achieving the full bonus, as well as large sites. Under the incentive system that was adopted, it was only possible to utilize the 20% bonus increment on large sites through the plaza bonus. The arcade bonus was too low to fill up the bonusable envelope of 20% additional bulk. Therefore the award structure for bonuses, as adopted, materially contributed to making assemblage more lucrative. It militated against smaller and medium sized sites being developed, because it was not possible for the builder to build an economic building and at the same time avail himself of the full 20%

bonus. I.E. the arcade bonus did not allow him to fill up the 20% bulk increment achievable; and the plaza bonus which would have filled it up would, on a small site, have restricted the typical floor size to uneconomic dimensions.

Even though the arcade bonus suggested by AIA was subsequently included in the comprehensive amendment, it could earn only a third of what the plaza bonus could. AIA had called for approximate parity in the award rates for covered and open space. In large part as a consequence of the disproportionate bonus award structure, hardly any arcades or public accessible covered open spaces were to be built in the years following adoption of the comprehensive amendment. AIA's proposed award structure would have been more conducive to achieving the objective of street wall definition and continuity of covered pedestrian spaces than the adopted incentive system. Buildings would have been lower. It is suggested that the city form that was gotten was not the result of conscious design considerations. Rather, it was in large part the result of pressure exerted by the big builders-owners community to have some kind of a way to favor the kind of development that they themselves were most interested in and to exclude smaller competing developments. By the same token, it might be argued that the AIA scheme, although also ostensibly emphasizing amenity, simply represented the position of a class of commercial interests with a stake in the development of moderately dimensioned properties.

Felt, in expressing his delight at the favorable AIA report, said many of the changes recommended in the report would be incorporated in the commission's own proposal.[23] On December 21, 1959, the City

Planning Commission's Proposed Comprehensive Amendment of the Zoning Resolution of the City of New York was published in the City Record. Although changes had been made along the lines suggested by the architect's subcommittee, a significant difference in the direction of the thrust of the respective sets of proposals is discernible. Whereas the New York (Manhattan) Chapter's report included numerous suggestions that would have been beneficial to the development of moderately dimensioned sites, the Planning Commission's proposal in using similar elements as those suggested by the architects used them in such a way that the principal beneficiaries would be the developers of large sites.

Whereas the CPC adopted the 20% limit, resulting in a maximum floor area ratio of 18 in the highest bulk commercial area, they failed, on the other hand, to recommend the kinds of measures suggested by the AIA that would have made it possible for potential developers of moderately dimensioned sites to have availed themselves of the full 20 percent bulk increment to be gained through provision of bonusable amenities. The effect of the proposals was that only the large site could actually achieve an FAR of 18.

The initially proposed 1 to 3 award rate for plazas in conjunction with the 30 feet non-bonusable rear yard precluded on the envisaged prototypical large site the generating of sufficient additional floor area through the bonus to reach the permissible FAR ceiling of 18. To overcome this obstacle, plaza bonuses were increased in high density commercial areas. Another indication of the preferential treatment of large sites was that the bonuses were graduated to allow for a greater bonus as the amount of plaza increased. Moreover,

different award levels for the various different FAR base levels were introduced. V. W. S. & S. had not differentiated between them. This differentiation tended to put the highest bulk district in a relatively even more favorable position, in that for the same amount of additional space as the other categories, a greater bulk increment could be added to an already larger base FAR.

In the CPC revision, the plaza definition was expanded:

> "An open area of not less than 8,000 sq. ft. with a minimum dimension of 80 ft. and which is bounded on one side by a front lot line or which is connected to the street by means of an arcade or by an open area not less than 40 feet wide."[24]

The definition of bonusable open space was broadened to include plaza-connected open areas unobstructed from the lowest level to the sky with a minimum dimension of 40 feet, connecting two plazas or a plaza with a street.

Although a bonus for arcades was also introduced, it was set much lower than the increased plaza and also much lower than the rate proposed by the architects. Two square feet of rental space in exchange for one square of arcade was offered. At such low award rate, moderately sized sites could not substitute the arcade bonus for the plaza bonus to make up the difference between an FAR of 15 and an FAR of 18.

FAR 15 mapping was extended between 48th and 53rd Street, from a line 50 feet east of Sixth Avenue (Avenue of the Americas) to a line 200 feet west of Sixth Avenue. In this manner 8 prime office building sites, four on each side of the avenue, came to be located in the highest bulk commercial district. In addition, they were

immediately adjacent to Rockefeller Center. These sites were, at the time, located in a one-and-one-half times height district, which reached to within 100 ft. east of 5th Avenue. The change facilitated even higher densities than possible under 1916 rules.

Eero Saarinen's CBS headquarters on the blockfront between 52nd and 53rd Streets, served as a demonstration model for the new zoning, with the Saarinen office helping to develop land coverage ratios to permit the plaza-surrounded sheer tower.[25] As such, it served as a prototype for the typical FAR 18 sheer tower on a block-front wide avenue site which was to be characteristic for subsequent FAR 18 office development under the new zoning resolution. The CBS Building was completed in 1964.

In residential districts changes included:

- raising of the plaza bonus from 1 to 3 to 1 to 5,
- introduction of a new R 9 district, an intermediate bulk designation with an FAR around 7, to fill the gap between R 8 FAR 4.5 and the old R 9 FAR 10 levels,
- relabeling of the R 9 designation to R 10 without changing the base FAR of 10.

These changes were responsive to AIA's request for an intermediate district between FAR 10 and FAR 4.5. In the question of mapping, however, the AIA reports suggestions had not been heeded.

- On the East Side of Upper Central Manhattan R 10 with an FAR of 10 was mapped largely where R 9 had been mapped previously, i.e. solidly between Fifth Avenue on Central Park to 150 ft. east of Park Avenue and between E 61st Street to East 96th Street; along the wide

cross streets stretching towards the East River - East 96th Street to the F.D.R. Drive, 79th Street to East End Avenue.

- All North-South avenues were designated for densities of FAR 10.
- R 9 was mapped liberally in place of the lower R 8 in interior blocks between 2nd and 3rd Avenues and 1st and 2nd Avenues. By providing a potentially greater intensity of use differential, a greater development incentive had been provided in areas to the east of Lexington Avenue.

At the press briefing, Felt, in expressing his determination to get the comprehensive resolution adopted, said: "This is the fight of my life." He was confident that the Board of Estimate would adopt the measure by July 1, 1960. "I sort of tingle when I think of it."

In response to the charge that the resolution would straight-jacket construction, Felt claimed that

> "About 10 to 15% would not have met the proposed new standards and that's the kind of construction we don't want any more of."

Felt and his associates argued that more than 60 percent of the buildings put up since WW II could have been built exactly as they were under the proposed ordinance as well. These included such structures as Lever House, the Seagram Building, both corporate headquarters, but also 711 Third Avenue, a rental office building.[26] Then, too, they argued, there were large post war buildings that did not conform to the proposed code, such as 2 Broadway with 1,359,800 sq. ft. representing an FAR of 18.3 on a plot mapped for a maximum FAR of 18 provided the bonuses were availed of. In response to the Commission's contention that the earning capacity of such buildings would not be

significantly reduced if they were to conform with new resolution, Richard Roth, Sr. a partner of Emery Roth and Sons, the architects who designed 2 Broadway, explained that while the building was only slightly larger than the bulk permitted under the proposed code, it could have been substantially larger - perhaps 10 stories - under the then existing code. Moreover, the slimmer base advocated by the new code would have resulted in floors with smaller area which would have been more difficult to rent because the demand was for large floors.[27]

Harold Uris of Uris Brothers, major investment builder-owners who was also president of the Investing Builders Association, suggested that a committee of builders and architects meet with officials of Mr. Felt's office to re-calculate figures on a score of representative buildings.[28] The Investing Builders Association's members estimated that they erected $400,000,000 worth of office structures and apartment houses in Manhattan each year, accounting for 90% of the Borough's new privately financed construction. Felt welcomed Uris's suggestion.

Hearings on the CPC's revision of the V. W. S. & S. proposal began on March 14, 1960 with Felt calling attention to the year's grace period proposed "in deference to the genuine problems of the professionals in real estate and building."[29]

Dr. Luther Gulick, co-chairman (with Robert Dowling) of the Committee for Modern Zoning, chided those real estate people who

> "...think they will be injured and their chances to make a million blocked by modern zoning. This is a shallow view. The reputable and responsible developer has nothing to fear."

Early adoption of the resolution was urged by

- Robert Dowling, representing the Citizens Budget Commission; as

president of the City Investing Company, he had wide Manhattan realty investments;

- James H. Scheuer, a major developer and president of the Citizens Housing and Planning Council;
- William Zeckendorf, of Webb and Knapp.

The representative for the City Club asked if David Tishman (a major investment builder), David Rockefeller and Robert Dowling all favored the proposal, could Frank Barrera, the spokesman for the Metropolitan Association of Real Estate Boards, who was in opposition, be speaking for the real estate community?

During the hearing, Felt worked to cultivate an atmosphere of cooperation. For example, he asked the speaker from the Avenue of the Americas Association (Sixth Avenue) to come and see him, adding: "You and I have been on intimate terms for years now."[30]

Manhattan's comment on Tuesday, March 22, 1960, was a chorus of general approval. There was, however, one significant dissent from the Real Estate Board of New York (Manhattan) whose representative told the Commission hearing that, in proposing specific map changes, it was not abandoning "in the slightest" its opposition to the resolution as a whole.

On may 1, the Mortgage Bankers Association asked that action on the city's new proposed zoning plan be delayed "at least until next fall," as more time was needed to study the plan.[31] This request was in direct conflict to the wish of Mayor Wagner expressed on the same day in a speech to the Citizens for Modern Zoning, who urged speed on adopting the zoning resolution.[32]

Nevertheless on May 2, one day later, the CPC announced postponement for at least four months of the date on which it was to submit its zoning proposal to the Board of Estimate, in order to be allowed a second round of hearings. The reason given for the delay on the resolution was the need to republish the revised resolution and maps for the second round of public hearings. Many changes had been made in the original draft since the first hearing. Original plans had been to submit the revised code on June 1.

Robert Moses still strongly opposed aspects of the zoning plan. On June 6, in a speech in Albany, he said:

> "Have you noticed how, in our periodic spasms of reform, we turn to alphabetical agencies for panaceas? Now there's a new one, right out of the lingo of city planning. If you have it, you have everything. It works three ways and is better than a doctor's prescription. It prevents congestion, promotes circulation, and makes you feel new all over. FAR looks ahead. It's automatic."[33]

Mayor Wagner said Mr. Moses, in deriding the proposed FAR formula as an "alphabetical slogan, had "criticized the only phase of the proposed new law that hadn't bothered anyone else."[34]

In a letter to the New York Times, dated July 1, 1960, Robert W. Dowling and Luther Gulick of the Committee for Modern Zoning listed the organizers who had gone on record in support of the rezoning. They warned that:

> "any town that lets the small fry of landowners and their agents do what they want about land uses, locations of buildings and factories, densities, heights and streets, will be old in a generation with narrow, crooked alleys, smelly and noisy factories in residential areas, no sunshine or clean air for anybody and suicidal traffic congestion. Chaos may seem attractive to a few selfish land exploiters. But it is a bad thing for all the rest of us, and is certainly no good for those investors who want stable land values and a healthy town."[35]

On April 19, 1960, the President of the New York Society of Architects, in a letter to the New York Times, made note of the fact that "The loud and repeatedly proclaimed press releases that reduction in bulk of large buildings" as were being built then would be "hardly perceptible," had "gained the active support of promoters and designers of large projects who use Title I and other condemnation procedures to obtain valuable land at public expense." He attacked the severe confiscatory restrictions that the proposed zoning law would place on "the smaller individual plot" - forcing those owners to maintain the status quo or sell at knocked down prices to the gigantic operators.[36]

- In alluding to Felt he denied any appointed public official the right to unilaterally "make such extensive transfers of our citizens' property rights without due process and adequate public hearings."
- He predicted that the proposal would not provide more flexibility in architectural design, but considerably less. "The present law has permitted construction of the world's finest buildings and in no consequent manner inhibits the work of the Planning Commission, Slum Clearance, Urban Renewal, etc."

On August 17, 1960, the CPC released its revised zoning resolution.[37] Once again the plaza bonus was increased. Ten square feet of additional floor space were to be allowed for each sq. ft. of plaza or plaza-connected open space over and above the mandatory open space requirements in highest bulk commercial districts.

Although the CPC spokesman stressed that the objective of the increased incentives was to provide more light and air for streets, it was understood, however, that the commission wanted to encourage more

buildings of the type of the new Chase Manhattan Building in the Wall Street area, built on 27% of its lot, and the Lever House on Park Avenue which covers 50% of its lot.

On the other hand the generous arcade definition as originally proposed by the AIA in 1959 was not adopted, neither was the bonus increased. An arcade was to be limited to a depth of not less than 10 feet nor more than 30 feet. Consequently, only a percentage of the covered space envisaged eligible for the arcade bonus under the AIA's proposal would be eligible. Instead of two sq. ft. of additional rentable space as at first proposed by the CPC, 3 sq. ft. were offered for the provision of 1 sq. ft. of arcade, the same amount as had been initially proposed for the plaza.

The problem of bulk controls of office buildings in the highest bulk commercial districts as perceived by major real estate interests had been one of making it possible to provide equivalent amounts of space as had been provided in post-war office buildings but in a more compatible building envelope. I.E. key real estate interests had set their sights on achieving an FAR of 18 for the prescribed, envisaged, postulated building envelope. At the same time, the problem was seen also as one of making it less profitable for small and medium sized sites to be developed than large ones because development of such sites would tend to preclude assemblage of large sites needed for large office buildings and also, to a certain extent, because the development of small sites with high density, high coverage and cheaply constructed buildings would tend to undermine the market situation of major office buildings. The effects of such construction could be considered to be

particularly undesirable if such structures were erected subsequent to and in the vicinity of a major structure that had contributed to the enhancement of the environment by providing for instance, a large plaza, as in the case of the Chase Manhattan Building. The cheaply constructed speculative building would benefit from the amenity, while at the same time tend to undermine the major buildings market position.

Investment builders pursued, then, an exclusionary objective. Incentive zoning was used as a device to pursue this exclusionary objective. In a series of incremental steps, incentive zoning was gradually fashioned into a device that would allow construction, at an FAR of 18, of a sheer tower with standard floors of economic proportions on the typical 200 foot block-front wide-avenue plot.

At the same time, the device worked to the disadvantage of developing small sites because the plaza bonus was designed so that advantage could not be taken of it on the smaller site, thus making it difficult or impossible to increase the bulk envelope above the base level of FAR 15. Neither could the diminutive arcade bonus that was introduced in the course of the process be used to appreciably increase the bulk envelope above the base level of FAR 15.

To get an indication of the order of magnitude of the degree to which the density differential could be increased, consider the case of an existing building with an FAR of 9, where the potentially achievable density differential could be increased by 50% if redevelopment occurred at FAR 18 rather than at 15. In general then, although redevelopment at an FAR 15 might be quite profitable, the prospects of the increased rate of return at an FAR of 18 was a strong incentive for

owners of appropriate smaller parcels to participate in an assemblage, as it was concurrently for developers to assemble large enough plots to full advantage of the plaza bonus.

Whereas under the 1916 rules, as will be recalled, exemption from the requirement to adhere to the sky exposure recession plane was granted only for twenty-five percent of the lot, under the proposal exemption was to be granted for the total area occupied by the building, provided it did not exceed 40% of the plot, and was set back from all front lot lines.

With the plaza bonus increased to 1 to 10, it now became possible to achieve the full 20% bulk increment attributable to bonuses in exchange for a relatively narrow "plaza" wrapped around the base of the tower.

In recognition of the unique problems of Manhattan's "central business district," higher bulks were extended to several commercial districts in the area.

- The C5 - 3 (FAR 15) area was extended westward along 57th Street to Eighth Avenue and to south of Columbus Avenue
- Two new bulk categories were introduced with FARS of 15 (C6-6 and C6-7). In the area to the west of Sixth Avenue, the CPC initially proposed C6-4 and C6-5 districts which had FARs of 10. Now, however, the Broadway area from 54th Street to 42nd Street was to receive a C6-7 designation. This area reached to 200 feet west of Broadway. The area between C6-7 Broadway area and Sixth Avenue received a C6-6 designation. With the exception of a few enclaves, all of midtown from 48th Street to 57th Street between Broadway to the west and

Third Avenue to the east was eligible for a FAR of 15.

The new C6-6 and C6-7 designations were applied nowhere else, except in Lower Manhattan, where the area between the bulkhead line of the East River and Water Street and from Fulton Street to Coenties Slip was changed from C6-9 to C6-6.

V. W. S. & S. had offered the following rationale for having lower bulks in C6 areas than in C5s.

> "High bulks and employment densities with resulting problems of congestion are common to both of these districts. However since the general scale of land values and existing bulks is somewhat lower in the C6 Districts, maximum permitted commercial bulks are scaled down accordingly, to prevent further extension of excessively high employment concentrations."[39]

This persuasive reasoning of the consultants was not enough to prevent the elimination of the differential in bulk levels between the two categories.

Most importantly, however, the new FAR 15 areas along Third Avenue to the east and as far as Broadway to the west, had considerably lower existing densities than the areas initially designated for an FAR 15 focused around Grand Central, where a substantial amount of high density construction had already gone up. Consequently, extremely high density differentials were achievable between existing and potentially possible new developments in many areas. Many locations had densities beneath an FAR of 5.

In this, the final revision, a number of changes were made to residential mapping that had been originally urged in the AIAs sub-committee's report of December 11, 1959. They affected mapping of the interior blocks between avenues:

- Typically the midblock areas that had been proposed for mapping at the new intermediate designation of R9, with an FAR between 7 and 7.5, were changed to the lower R 8 with an FAR of 4.5.
- Most of the lower R7 - 2 midblock designations were changed to the higher R 8 classifications.
- With a few exceptions most of the many sixty-foot-wide side-streets mapped with a base FAR of 10 were cut back. This was in accord with the recommendations of the AIA.

There remained, however, a number of significant exceptions where R 10 was retained:

- In the Murray Hill area, the entire block bounded by E 35th, E 36th, Madison Avenue and Park Avenue.
- A 10 block area south of 59th Street between East River and First Avenue.
- In the Carnegie Hill area from 86th Street to 90th Street between Fifth Avenue and Park Avenue.
- From 94th Street to 97th Street between Park Avenue and Madison Avenue, the block bounded by 95th Street and 96th Street, Fifth Avenue and Madison Avenue.

By August 1960, then, the final pattern of residential mapping had emerged. All north south avenues and wide cross streets had been destined for densities at a base FAR of 10. All interior blocks on the East Side had been downzoned as a deterrent to redevelopment. On the West Side the pattern was similar.

Major investment builders had thus secured their interests over a two year period in an interactive ongoing process in which three

basic steps may be identified:

- In February 1959, under the V. S. S. & S. proposal, proposed achievable densities between Lexington Avenue and Fifth Avenue were raised on an area wide basis while at the same time, to the east of Lexington Avenue, they were lowered below the level achievable under the 1916 rules.
- Under the CPC revision of the V. W. S. & S. plan for rezoning New York City of December 1959, achievable bulks in both midblock and on avenues were raised substantially east of Lexington Avenue, above the levels proposed in February 1959.
- Under the Final Plan of August 1960, R 10 was proposed 125 feet deep along all north-south avenues, and on wide cross streets. While with a few exceptions, potentially achievable densities in all interior block locations were cut back to the extent that any proposed prior significant density differential was eliminated.

According to a former official of the Department, these were chief bargaining concessions that had to be made to the real estate lobby to win acceptance of the Zoning Resolution.

In this manner, then, a pattern of high-density "mountain ranges" along the avenues, and "low density valleys" on the side streets, was established, providing light, air, exposure and outlook to tall and bulky buildings on the avenues at the expense of the low rise interior blocks. In pronounced contrast to this distinctive pattern of the areas of investment building, on the Lower East Side, both wide avenues and narrow side streets were mapped R7.

The plaza bonus had undergone significant transitions. It will be

recalled that initially a 1 to 3 bonus had been proposed by V. W. S. & S. to encourage the setting back of buildings from the street in line with those areas where narrow side streets were proposed for FAR 10 remapping, in order to bring more light and air into streets surrounded by tall buildings. Only a slight increase in bulk was anticipated. As initially conceived then, the device was intended for application on narrow side streets rather than on wider avenues because the avenues mapped for FAR 10 at the time had already been largely developed at high densities. Subsequently, however, inner block densities were lowered, so that the device was no longer applicable in the initially conceived context. However, concurrently, avenues with low existing densities were designated for FAR 10, thus, creating on these avenues the potential to achieve a significant density differential. At the same time a limit was set of 20% to the bonus part of the envelope. This was significantly more than envisaged in the initial examples of V. W. S. & S. Although set as a limit, the achievement of the 20% bulk increment was to become the rule. In order that the 20% could be fully availed of on the typical blockfront wide avenue site and in order that at the same time, a building could be built meeting the demands of investment builders, it was necessary, given certain economical coverage ratios, to increase the rate of award for the bonused open space by 100% to 1 to 6.

A similar process was also experienced in the high bulk commercial areas (FAR 15). Here, the award rate for open space, also initially pegged at 1 to 3, was proportionately lower than in the FAR 10 districts. Here, too, the 20% bulk increment was subsequently applied and the bonus

award rates for open space ultimately more than tripled, so that the full 20% increase in bulk could be practically availed of on the prototypical site.

The investing building community was pleased with the proposal's final form and took active steps in support of it.

- On September 6, 1960, 15,000 copies of the book "A City Speaks" containing favorable statements on the proposed zoning law made at the public hearings in March was released for distribution by Dowling's Committee for Modern Zoning.
- The builders of Manhattan's major new office buildings and apartment houses announced on September 7 that they endorsed "enthusiastically and unequivocally" the City Planning Commission's final draft of the proposed new zoning code as it applied to Manhattan. Lewis Whiteman, executive director of the Investing Builders Association, said that until the day before, the group had not taken a firm stand on the proposal; and added that the endorsement applied only to those provisions that related to Manhattan, because the group's studies had been confined to that borough.[40]
- Thomas Jefferson Miley, executive vice president of the Commerce and Industry Association, said his group now whole-heartedly supported the resolution. He observed that it had been amended substantially to reflect the recommendations of "other responsible groups."[41]
- A statement signed by David Rockefeller and John D. Butt, respectively chairman and president of the Downtown Lower Manhattan Association, said that the revised version of the code as it applied to the downtown financial and waterfront districts would serve the best interests

of those areas.[42]

- On September 8, 1960, the New York Manhattan Chapter of the AIA, in breaking with the other borough Chapters who remained in opposition, endorsed the revised proposal.[43]
- On September 9, 1960, the Real Estate Board of New York (Manhattan), in breaking with the other four boards of the Metropolitan Association of Real Estate Boards who remained opposed, reversed its earlier firm opposition.[44]

On September 9, 1960, the influential New York Times, in noting that the "big builders...could undoubtedly have defeated it", hailed the Investment Builders Association's endorsement in an enthusiastic editorial entitled "Big Builders Back Rezoning."

> "The Investing Builders Association represents practical men. If they thought this new resolution would ruin them, they could undoubtedly have defeated in the Board of Estimate. Instead they are happy to endorse the proposed zoning resolution."

At a Planning Commission hearing held on September 12, 1960, strong objections to rezoning continued to come from real estate and architect groups in Brooklyn and the Bronx, and the Queens Chamber of Commerce, who argued that the new law would favor Manhattan builders over those in the other four boroughs. Nevertheless, on October 18, the CPC unanimously adopted the proposed rezoning. The Board of Estimate had now 60 days in which to act.

In the ensuing period, Robert Dowling, as co-chairman of CMZ, continued his active leadership role in support of the new zoning. He led a group including David Rockefeller, vice chairman of the Chase Manhattan Bank, and Earl B. Schwulst of the Bowery Savings Bank, in a

joint letter to Mayor Wagner, asking prompt approval of the forward-looking and long-needed zoning reform. Nevertheless, substantial opposition continued to be directed at the proposed Comprehensive Amendment. On November 15, 1960, the Architects Council of New York City, composed of the Bronx, Brooklyn, Queens and Staten Island Chapters of the AIA, the New York Society of Architects and the Brooklyn Society of Architects, but not including the New York (Manhattan) Chapter of the AIA, again attacked the proposed new zoning resolution.[45]

- By making it economically unfeasible for builders to replace existing structures, it would cause old buildings to remain standing and thus contribute to deterioration of the city;
- It would not in practice provide the light, air and open space its sponsors promised;
- It would lead to an esthetically monotonous city;
- It would favor the large land owner over the small;
- It was so complex as to threaten paralysis of new construction;
- It would give the Planning Commission dictatorial power, making it more difficult for a dissatisfied property owner to object to a Commission decision.

At the Board of Estimate hearing on November 20, 1960, Dr. L. Gulick, co-chairman of CMZ, speaking immediately following Barrera of the Brooklyn Real Estate Board, who had charged that the proposal was geared to "giant developers, builders of huge luxury apartments and public housing, while ignoring the little man," said that architects and builders fighting the proposed new resolution were "motivated by a distinct personal interest in a chaotic development of this town."

On December 15, 1960, the Board of Estimate adopted the Comprehensive Zoning Amendment unanimously. In casting an affirmative vote, Mayor Wagner said he felt "justly proud to play a part in this historic legislation that will affect the wellbeing not only of this generation, but of generations to come."

In an editorial marking the occasion, the New York Times, in noting that the credit list for this politically improbable consummation was long and that Mayor Wagner's personal leadership went back to at least 1947, when he served as CPC chairman, called attention to the "trusted diplomacy and dogged perseverance of James Felt," Mayor Wagner's appointed chairman of the commission, who had "won over hardened opponents in a miracle of reversal."[46]

The urgency to tackle the problem of changing the geometric rules had been substantially affected by fluctuations in the demand for space and also concomitantly by changes in the type of space in demand. Alternate geometric rules that did not meet precisely defined specifications of key controlling classes of real estate interest were resisted. The various prescribed prototypes proposed over an extended period of time were distinguished from the 1916 ziggurat prototype of the varying degrees by which cubage was cut back from the base of that percentage of the plot allowed to penetrate the sky exposure plane. The problem of changing the geometric rules finally culminated when the limited opportunities to build large 25% coverage towers at prime locations began to be exhausted, demand for superior space continued to be strong,[47] and a need was perceived to exclude high coverage, high density buildings on small and medium sized sites. In that, to a greater or

lesser degree, in the various proposed prototypes cubage was cut away from the base of the permitted tower portion of the building, there was a distinct resemblance to Flagg's model that, prior to 1916, had been presented as a more desirable alternative to the one that was ultimately enacted.

The investment building community desired to exchange substandard deep space at the base of towers for substantially increased amounts of space on high floors with superior environmental attributes, including outlook. Such cutting away of cubage at the base, allowing for landscaped plazas, concomitantly improved the environmental attributes of the remainder of the space on lower floors. Incentive zoning represented a convenient means to convert on a selective basis - i.e. for towers on a large site - such less useful space into more useful space. The plaza-tower bonus system evolved in an interactive process aimed at the resolution of a specific problem in the management of the production of space.

Although initially primarily intended as a technical device to facilitate redistribution of a given prescribed number of FAR points on a postulated prototypical site, the principle of incentive zoning, once established, was to be increasingly used as a way to achieve a variety of objectives through use of FAR points as a kind of surrogate currency.

This chapter has stressed how, early in the final stage of the zoning process, emerging incentive zoning's potential was recognized as a key means to rectify specific shortcomings of the 1916 code pertaining to the construction of high-density office and residential

buildings. It has described the ensuing interactive and incremental process -- and the influential role played in it by the investment building community -- of reformulation of the initially proposed device and its transformation to facilitate construction of high density residential and office towers surrounded by space and without setbacks.

Chapter 6

The Grace Period - A Critical Constituent Element in an Adaptive Strategy of Managing the Production of Space

This chapter takes a closer look at the role played by the Grace Period in the transition to the new Zoning Resolution.

At the final hearing, the representatives of the HRH Construction Co. and the Building Trades Employers Association, and the Planning Consultant to the Brooklyn Borough President had sharply contested the view of one opponent who:

> predicted that after a tremendous building boom caused by builders filing plans under the existing laws, during a one year grace period, there would be a devastating slump. [1]

On March 29, 1959, approximately 18 months before final adoption of the resolution, Felt had asked that V. W. S. & S. modify the proposal for the benefit of the building industry by inserting a provision for a period of grace starting with formal adoption of a final rezoning plan.[2] During such a period, 12 - 18 months, builders would continue to construct under the 1916 rules. In indicating that the CPC was prepared to establish such a grace period even without a recommendation from the consultant firm, Felt said such a grace period was necessary because of the time required for

builders to obtain financial backing and prepare plans and specifications and because financiers, builders, architects and engineers of new construction would otherwise remain in a state of uncertainty about future plans. Felt expressed the hope that the consultants would submit a recommendation for a grace period before April 13, the date of the first hearings.

In conceding that the suggested long period of grace might result in a flood of new construction well in advance of the effective date of changes, he said:

> The extended deadline would give everyone involved a maximum opportunity to plan ahead and to make the transition to the new resolution as smooth as possible.

The decision was taken "to insure maximum stability in the building and real estate industries during the important transition period following approval of a new resolution."

Felt explained that after an examination of the legal and administrative problems involved, it was determined "that it would not be feasible to operate simultaneously under two different zoning resolutions."

In general, key real estate interests responded enthusiastically to the delay.

- Erwin S. Wolfson, one of the city's large builders, said the grace period was very desirable, adding that it would make for an orderly transition from the old to the new resolution. Wolfson headed a building group that planned to begin, in

the coming spring of 1960, on a $100,000,000 55 storey Grand Central City -- later to be known as the Pan-Am Building -- at the foot of Park Avenue above the tracks of the New York Central.[3]

- Richard Roth, Sr. of Emery Roth and Sons, architects, said that while he too welcomed the time extension, he would like to see even more time given and the effective date extended to January 1, 1962, rather than to July 1961.[4]

> But it is definitely a step in the right direction, particularly when one considers that the proposed new zoning law is a new and somewhat radical instrument for us in New York -- builders, architects and mortgage lending institutions as well.[5]

- The chairman of the Metropolitan Board of Real Estate Associations expressed relief at the announcement of the time extensions. In disclosing that several major construction projects -- commercial and residential -- had been shelved indefinitely after the draft of the proposed new resolution was made public in February, he said:

> Now most of the builders have decided to go ahead and build...Generally speaking, builders and mortgage lending institutions are relieved to hear of the extension of time. Many of us in the field of real estate had urged that a grace period be granted, not so much because we thought that the proposed zoning resolution was good or bad, but mainly because of the uncertainty that prevailed as to just when the new resolution would become effective.[6]

One leading builder described the grace period as a "guillotine ready to drop after which the real estate market will be adversely affected." In the meantime, he predicted, land prices are going to rise sharply in anticipation of the proposed zoning regulations becoming law:

> Now everyone will begin to race to put up buildings before the guillotine falls...Admittedly, we may need new zoning laws, but if we are to have them, then lets have them now without further delays which are having an adverse effect on the cost of land. 7

On September 14, 1959, about two and one half months later, the New York Times published an editorial lauding the decision:

> This policy would enable builders and real estate developers to continue to advance projects without hesitancy or uncertainty as to when the new zoning may go into effect.

But in early 1960 immediate rezoning of Greenwich Village was called for to protect the character of Greenwich Village, threatened by the construction of large luxury apartment houses, permitted to rise one and one fourth times the width of the street they were on. With the impending zoning revision and its grace period, the situation was particularly grave as there was a considerable incentive for developers to rush to beat the deadline by replacing the predominantly smaller structures. A typical case of the way in which the impending lowering of allowed bulks was taken advantage of was the earlier cited example of a 20 storey

apartment house with a FAR of 18, occupying an entire avenue blockfront in the East Sixties. Under the initially proposed code an apartment house in the area where the new building was situated would have been limited to a floor area ratio of about 4.5, or about one-quarter of the bulk of the building that was completed at the end of 1959. Subsequently, however, the mapping was changed to allow a FAR 10 on avenues.

More typical of the effects of the grace period are the buildings that were built in interior blocks. After expiration of the grace period, the potentially achievable density differential would be drastically reduced. A case in point was a cooperative built at 8 East 83rd Street between Fifth and Madison Avenues.[8] The height of the part of the building lying within 100 feet of Madison Avenue -- 40 feet of frontage -- was controlled by the more liberal rules pertaining to Madison Avenue. The rest of the lot was governed by the more restrictive rules for the 60 feet wide side street. In their desire to maximize the rental area, the architects did not, as was the usual practice, let the building conform to the more restrictive rules for the side street. Instead they let the easterly portion near Madison Avenue rise to 16 storeys in height. The westerly portion extending 177 feet along the 60 feet wide side street toward Fifth Avenue, was limited by the envelope configuration to a height of 14 storeys. As a result of applying the two

different sets of regulations, the bulk envelope was utilized to the utmost.

Developers exercising these options were capitalizing on the superior competitive position that their developments would have when, after lowering of permitted bulks, competing developments of similar dimensions would be excluded, and outlook, light and air could be ensured. Impending lowering of permitted bulk levels encouraged developers to take increased risks with respect to location. A certain riskiness of location, e.g. midblocks or locations east of Lexington Avenue, were traded-off against a perceived security to be gained with subsequent imposition of the new code, in other key attributes.

The more that advantage was taken of such opportunities the greater was the interest of those that had availed themselves of the opportunity to have the more restrictive geometric rules imposed. Consequently, they resisted further extensions of the deadline. The greater the certainty that more restrictive rules would be imposed, the greater the desire of other developers becomes to avail themselves of the opportunity to build at higher densities. The incentive effect of the impending deadline was to lead to a very sizeable addition to Manhattan's housing stock in a short period of time.

It must be clearly recognized though that large cut-backs in terms of allowed bulk were only imposed in the area of residential land use in Manhattan. In the area of office building, bulk levels subsequent to the enactment of the resolution were to remain approximately the same as those hitherto achieved. In consequence, whereas construction of office space continued to increase in the 60's, there was to be an almost total cessation of privately financed residential construction.

Under the provisions of the law, builders who filed applications for building permits accompanied by plans prior to December 15, 1961, one year after adoption of the Comprehensive Zoning Amendment, were permitted to build in accordance with the old zoning resolution, despite the fact that neither construction nor demolition need have been started before the new resolution went into effect.[9] During 1961 and up to the cut-off date of December 15 of that year, builders filed permit applications for 210 apartment buildings in Manhattan, containing a total of 29,240 new apartments. In order to beat the deadline, during the first two weeks of December 1961, builders in New York City filed 22,155 applications worth $2 billion, for building permits under the old ordinance.[10]

The time-consuming and difficult task of completing relocation procedures prerequisite for obtaining eviction permits contributed to the difficulties of property owners trying to develop residential sites under the old zoning resolution by the December 15, 1963 deadline. By this time, foundations had to be completed and substantial expenditure made on the superstructure. In addition, the situation was further exacerbated because the pending World's Fair had absorbed large amounts of building labor.[11] Many builders felt that the zoning deadline had created a building log jam that could only be eased by an extension of the deadline. In consequence, in October 1962, the Investing Builders Association, composed of sixty owner-builder companies, asked the CPC to extend the deadline for completion past the date set for December 15, 1963. They cited the sharp increase in the number of new apartment buildings under construction in the city and the concomitant shortage of skilled construction workers. This made it difficult to complete buildings in the two year grace period under the more liberal regulations of the old ordinance.

- Lewis Rudin, principal in the Rudin Management Corporation, described many of the new apartment buildings as "inferior products" and their builders as "men who came from nowhere and knocked the market of its feet."[12] He called

attention to the fact that many prospective tenants were seeking concessions.

- Joseph P. Blitz, head of a building company bearing his name, said the renting market was still good for apartments on prime sites.[13]

- Robert Bennet, vice president of Douglas Elliman and Co., a renting and management concern, said there would be overproduction for at least three years, particularly on "secondary sites" along First and Second Avenues.[14]

- William Zeckendorf, chairman of Webb and Knapp, concurred and said that after that there would be a complete shutdown in residential building because land would have less functional value under the new zoning code.[15]

In the Fall of 1962, Arthur K. Beman, vice president of James Felt and Co., said that architects, builders and real estate men were gradually changing their idea of the value of land, owing principally to the introduction of the new zoning resolution.[16] Under its provisions, a large plot might, in many instances, enjoy an increase in utilization, much greater than would be expected by adding the sum of its parts. Small lots, on the other hand, having a relatively low ratio of permitted use, cannot be improved to the extent that the large plot can. With respect to land which was already profitably improved, Beman said such land was not subject to the factors of change that affect un-

improved land, because it is not affected by the new zoning regulations, and a year before, in October 1961, James Felt had asserted that in the last year the value of improved real estate had attained greater stability. This strengthening of the market he attributed to the new zoning resolution.

In an editorial dated April 10, 1963, entitled "Sabotage of New York's Zoning," the New York Times called for no more extensions of the grace period. On 23 May, 1963, an irate letter from Max Siegel, President of the Zoning Advisory Council, was published in the New York Times taking exception to the editorial point of view:

> It is wrong to place the whole blame for the recent unprecedented overbuilding and consequent saturation of the rental market on "the speculative builder". The onus properly belongs on the framers of the new zoning resolution. It is now apparent these zoning experts grossly underestimated the volume of new construction that would take place by reason of the grace periods set by them.
> The recent overbuilding in our city was a direct result of too short a grace period. Had a five year grace period been allowed originally by the zoning experts, we would not be faced with the chaotic conditions existing in all phases of the real estate and building industry, as well as in allied professions. Now that a saturation of the rental market has occurred, those interests who were in a position to build under the short grace period join with the ivory tower proponents and seek to eliminate the same privilege for others, who were unable to begin construction for cogent reasons beyond their control.

On 30 July 1963, the CPC announced that on August 14 it would hold a public hearing on a proposed amendment to the 1961 Zoning Resolution that would allow builders to apply to the Board of Standards and Appeals for extensions of Building Permits beyond the December 15 cut-off date, provided the following conditions were met:[17]

- Failure to receive approval of plans by March 15, 1963, due to delays in processing by the Department of Buildings or other governmental agencies;
- Failure to gain full possession of the building by March 15, 1963, because of unforeseeable delays in the processing of applications to the Rent and Rehabilitation Administration for eviction certificates or in court proceedings.

Under the proposal, the Board of Standards and Appeals was to be able to grant permission to allow continuation for one year -- or two years for large scale developments -- for buildings on which there had been substantial construction above the foundations.

On 18 September 1963, the Planning Commission voted 4 to 2 for the measure with Lawrence Orton and Elinor C. Guggenheimer dissenting. In a minority report, they argued that enough grace time had already been granted, that an unexpectedly large volume of speculative building had

resulted and that the new code should be accepted -- and enforced -- as the law of the city with no amnesty for any reason.

The New York Chapter of the American Institute of Architects had taken a similar standpoint:[18]

> The New York Chapter of the American Institute of Architects was among the groups that made a thorough study of the new zoning resolution and battled hard and long for its adoption. It was a significant and far reaching victory for the people of the city and the generations to come. Now consideration is being given to postponing its enactment until 1964 and in some cases, until the end of 1967. If this is done, how will our city's responsible officials justify the complete disregard of the years of work and effort that went into the development of this resolution, of the benefits it will bring to the people of New York who said over and over, in every way possible, that they wanted this resolution enacted and put into effect?
>
> This Chapter calls on the Mayor, the Board of Estimate and the Planning Commission to do everything possible to see that the will of the vast majority of our citizens is not sacrificed to the interests of a small group of people who would like to see this resolution diluted and delayed for their own personal benefits. We ask that the resolution be implemented as soon as possible!

Nevertheless, the Board of Estimate adopted the amendment on 17 October, 1963.

60 new apartment buildings, containing a total of 8,125 apartments, were completed in 1962 in Manhattan. More than twice as many buildings were under construction in December 1962. While no foreclosures were reported among the builders of the many new luxury apartment buildings, Manhattan lenders

of construction fund mortgages were coming to the aid of those builders experiencing difficulties. Mortgage loans were being abated. While the builder continued to pay interest on his loan, the payment on the principal of the loan could be delayed for a period of a month. Depending on the size of the loan, usually several million dollars, the amortization payments generally ranged between $40,000 and $60,000.

The decline in property sales and plans for new building led to an abundance of mortgage money in the hands of banks and insurance companies. The surfeit of funds tended to lead to a lowering of interest rates.

By the fall of 1969, private new apartment construction filings and completions in Manhattan had reached a low point. The backlog of building permits issued under the old ordinance finally began to be exhausted. Additional negative factors included soaring mortgage interest rates and construction costs.

In summary then the grace period enabled primarily major investment builders with ready access to financing to exploit the substantial achievable density differentials under the old code in areas where, after enactment of the new code,

density differentials would be eliminated. Investment builders could build high density residential structures at key locations in low and medium density areas, such as in Greenwich Village or on East Side side streets, secure in the knowledge that their structures would benefit from superior outlook, light and air, as, with the expiration of the grace period, any significant achievable intensity-of-use differential would be eliminated in the vicinity, thus reducing the likelihood of further comparable redevelopment. As a consequence, considerable value of scarcity could also accrue to the developer. Within limits, the longer the grace period, the greater was the inducement to back the new code. But the grace period contributed to a major increase in the stock of new housing, an increase that would otherwise not have occurred.

PART II TOWARDS A MORE RESPONSIVE MANAGEMENT OF THE SPATIAL ENVIRONMENT

Chapter 7

Tooling Up for a More Responsive Management of the Urban Spatial Environment: Structuring the Planning and Developmental Functions In New York City

This chapter will review the extended and ongoing process of reorganizing and restructuring the planning and development functions in New York and its significance in furthering the end of a more responsive management of the urban spatial environment.

Initially, government sponsored renewal projects, based on the Housing Act of 1949, were concentrated in and around midtown Manhattan. These were not obscure, declining, neighborhoods, but choice, commercial land. They included Columbus Circle, Lincoln Square, Pennsylvania Station South. They required total subsidies in the neighborhood of 1 million dollars per acre.[1]

In 1960, the disclosure of scandals had led to the dissolution of the Mayor's Slum Clearance Committee. In the Spring of 1962, Wagner established the Mayor's Housing Policy Executive Committee, to expedite housing and urban renewal programs. The programs had become bogged down because there was no single

coordinating authority as there had been when Robert Moses had headed the Slum Clearance Committee. In 1955, after many years as a key official with the New York City Housing Authority, Samuel Ratensky became director of the Urban Renewal Board, which had been set up as a reaction against the wholesale clearance methods of Moses' Slum Clearance Committee to administer the West Side Urban Renewal Area. City Planning Commission Chairman James Felt was head of the board. Moses had planned massive clearance and subsequent rebuilding of virtually the entire West Side of Manhattan, from 59th to 110th Street.

The Lincoln Center Urban Renewal Area was a prime example of Moses' approach to city rebuilding. Robert Stern has described its two component projects as "two massive projects in search of a neighborhood, one for culture (Lincoln Center for the Performing Arts), the other for living (Lincoln Towers)."[2]

The West Side Urban Renewal Area in New York City was conceived in 1958 by Samuel Ratensky as an answer to Moses' methods. Lincoln Center and the West Side Urban Renewal Area represent polar extremes. Whereas Lincoln Towers was a super-blocked enclave of repeated buildings with a homogeneous economic and class tenancy, the West Side Urban Renewal area substituted extensive rehabilitation of the rundown brownstones on the side streets leading west from Central Park, concentrating new

apartment construction along Columbus Avenue, where an elevated railroad, torn down in 1960, had spawned tenements of the worst sort; and provided a broad community mix through the use of leased public housing in middle income cooperatives and other legal controls. The sites ranged from 7,2000 square feet on side streets to 40,000 square feet on avenues. Over the several stages of the program, some entire streetfronts were to be rebuilt, but at the respective stages -- the new structures were mainly non-contiguous. Consequently, at the beginning, new development was adjacent to old buildings, many of which were in a deteriorated condition. The older buildings that were to be retained were rehabilitated. Subsequently, both the Slum Clearance Committee and the Urban Renewal Board were merged into the Housing and Redevelopment Board. Mr. Ratensky became chief of its Office of Project Development.

The Housing and Redevelopment Board, established in 1962, was the product of a plan prepared by J. Anthony Panuch to consolidate housing functions. It absorbed the Mayor's Slum Clearance Committee, which had administered all Title I programs; the Urban Renewal Board, the Neighborhood Conservation Program, the Mitchell Lama and Redevelopment Companies under the Office of City Comptroller; and a new program of Municipal Loans in aid of rehabilitation. The City Housing Authority, which built and operated low rent public housing, remained separate, as did

the Departments of Building and Real Estate. The Rent and Rehabilitation Administration was under the State. Milton Mollen was appointed chairman of the Housing and Redevelopment Board.

On April 28, 1964, a front page headline of the New York Times announced: "Wagner to Name Mollen Deputy Mayor for Housing within Two Weeks."[3] The post had been under consideration since the Mayor's Housing Policy Executive Committee had been established two years before. The Deputy Mayor for Housing was to direct programs of the Departments of Buildings, Relocation, Real Estate and the Planning Commission.

But about a month later, on May 24, 1964, the Times carried the following headline: "The Mayor and Mollen - Wagner firm on Plan for New Post, but opposes Adding Title of Deputy." Not even Robert Moses, as the City's housing czar, had enjoyed such status and so the weaknesses revealed in the one man rule, which led to decentralization, did not reflect directly on City Hall. Because the City was the biggest landlord, direct identification of City Hall with housing problems would be not only practically unwise, but also politically foolhardy, commented Clayton Knowles in the Times. It was feared that a Deputy Mayor directly charged with functional responsibility would undermine the authority of the two existing Deputy Mayors, both generalists, with across the board concern for city affairs. Moreover, departmental heads

were concerned about the reduction in their status should the concept of functional Deputy Mayors be accepted.

The City Planning Commission, under William Ballard, was partificularly vociferous in its objection to the post of Deputy Mayor.

Half a year later, on January 16, 1965, Mayor Wagner appointed Milton Mollen, chairman of the Housing and Redevelopment Board, to a newly created post - Coordinator of Housing and Development. In this position he was to be responsible for coordinating, reviewing and setting policy for all the City's housing and related activities. While relinquishing the position of chairman of the Housing and Redevelopment Board, he remained on the Housing Executive Committee and the Housing Policy Board. The new office of the Coordinator of Housing and Development was appropriated a budget of $145,000 with Mollen's salary set at $35,000. 80% of the cost of the administrative machinery was to be contributed by the Federal Government. "As our housing problems have increased in complexity, the need has grown for ever greater coordination to insure maximum efficiency," Wagner said.[4]

Eight weeks later, on March 15, 1965, Boston's Redevelopment Administrator Edward D. Logue, in a speech at the Bards Awards Ceremony, urged New York:

> To throw away coordination as a system of running urban renewal projects and create a single Boston-style agency to do the job. What the city needed was a guy named Jones, who would combine in his office the authority for renewal projects now dispersed among ten or a dozen city agencies.

In Manhattan's West Side Urban Renewal project, Mr. Logue observed, the Building Department, the Department of Public Works, the City Planning Board, the City Housing Authority and five other agencies were trying to work together on the plans.

> Coordination hasn't worked. You run into Parkinson's law that efficiency decreases as executives proliferate. 5

In 1960, when Logue came to Boston, there had been a Redevelopment Authority and a Planning Board which subsequently had been merged into the Boston Redevelopment Authority.

> It's great you know, what happens is that city planners are far more productive. The quality is improved by having the redevelopment types mixing together in the same office with the planners.

Mollen did not get to do too much coordinating of housing and development, because on July 19, 1965, i.e. within six months of his appointment, he announced his resignation to run for Comptroller on the Republican - Liberal fusion ticket of John V. Lindsay.

> The Wagner Administration achieved many accomplishments and I am proud to have been a participant. But it is time for a fresh approach to vast new problems...Basically there has been a lack of resources to do the overall job. 6

The newly created post was left vacant. Exactly one week later, on July 26, 1965, at Gracie Mansion, Mayor Wagner applied and administered the oath to Samuel Ratensky, Chief of the Office

of Project Development of HRB, as a member of the board. The board vacancy had been created in January when Mollen had left the chairmanship of the three member board, and Herbert B. Evans, a member, had been named to succeed Mollen as chairman.

Lindsay was elected mayor on November 8, 1965. On November 22, 1965, Mayor Lindsay stated that Milton Mollen, the unsuccessful candidate for Comptroller "was still under consideration for a major city post, should he still be interested in public life." Mayor elect Lindsay asked the commissioners of the outgoing administration to stay on until there was more certainty about which changes were to be made.

In its December 28, 1965 editorial, the New York Times commented caustically:

> In terms of planning and urban design, the Lindsay administration inherits a blank check for chaos and some of the most undistinguished new construction in the world.

One of Lindsay's first actions, as mayor, was to appoint a housing study group to consider problems in the area of housing and urban renewal, and to make suggestions on priorities among the proposals offered during the election campaign. Professor Charles Abrams of Columbia University headed the study group. Among the task forces' members were Edward J. Logue, head of the Boston Redevelopment Authority and David Crane, professor of City Planning at the University of Pennsylvania.

On January 15, 1966, Professor Abrams presented the findings of the task force to the mayor.[7] There were three primary facts detrimental to the city's housing situation:

- The multiplicity of agencies involved in housing;
- continuing deterioration of the City's housing stock, despite vast amounts spent to replace it or correct it;
- a tendency to curtail funds for public housing from State and Federal sources.

The group's main recommendation was that a new housing administration be placed in charge of the functions of:

- The Housing and Redevelopment Board,
- The Housing Authority,
- The Department of Relocation;

and also of some of the functions then handled by six other departments:

- The Rent and Rehabilitation Administration,
- The Department of Real Estate,
- The Department of Buildings,
- The Department of Health,
- The Fire Department,
- The Department of Water Supply, Gas and Electricity.

In that the head of a single city housing agency would be able to deal directly with the U.S. Secretary of Housing and Urban Renewal, it would be easier to obtain urban renewal funds, the group believed.

The Commissioner for Real Estate, Frank L. Lazarus, said the Abrams report:

> ...sounded great. It should be done. The main thing is getting competent people. They don't want to work for the Government and get mixed up in politics, knowing they may be thrown out whether they do a good job or not.

Three days later, after the release of the report, it was announced that the Ford Foundation, through the Institute of Public Administration, would finance a "Housing and Neighborhood Improvement Survey," and Edward J. Logue was appointed to head the study.[8] A report was due on June 1, 1966. It was speculated that this might lead to Logue's eventual appointment as Mayor Lindsay's overall housing administrator.

On February 15, 1966, Mayor Lindsay, in observing that the CPC concerned itself more with zoning changes than with long range municipal planning, said he was disturbed "that the City Planning Commission, which is responsible for our future appearance, is only fussing around with zoning."[9]

William Ballard, chairman of the CPC, felt that the Mayor, in spite of his critical remarks, was "upgrading" the Planning Commission. Ballard was bitter about the crippling effect that the City's independent authorities had on the planning operation,

in particular, those headed by Robert Moses:

> Transportation has been Robert Moses own satrapy - he has run it with no regard for anyone else. He'd get State and Federal authorities and money, and then present the city with a fait accompli. If there were any objections, he'd say "You'll lose $60,000,000 in state money." He rode roughshod over the planning operation, but now we are finally getting it reversed and I'm delighted. 10

The Commission should be "free to take a bolder attitude in the governmental process."

Lindsay's aides were studying whether it would be possible to oust Robert Moses from his post as City Coordinator of Federal, State and City Highways, a position created in a memorandum by Mayor Wagner, or whether bargaining with him would be the more feasible approach. Lindsay was eyeing the huge operating surpluses of the Triborough Bridge and Tunnel Authority, headed by Moses, with the view to using them to subsidize the City's mass transit operations - an idea that was anathema to Moses.

On his appointment, William F. R. Ballard had seen as his task the completion of the Master Plan for the city, one of the three Charter assignments of the City Planning Commission when it was established in 1938.

> When I started this job two years ago, I said completion of the master-plan was our first job, but since then I've had tc sit down with my staff and decide what the hell that statement meant. In 1938, the master-plan was thought of in terms of the city beautiful. Today we're more realistic and tough. A master-plan would be a commitment to undertake certain courses of action.

Ballard promised the completion of the plan by 1967. It was to be comprised of a series of maps, future capital budget projects, changes in streets and maps as well as the arrangement of residential and non-residential building.

> But the plan must not be a one shot affair. It must be reviewed and changed regularly. If it had been drawn up in 1938 it would be inadequate and out of date today.

An indication of how weak the Planning Commission was is the fact that out of the City's Site Selection Board's 5 votes, the CPC had only one.

At the end of 1965, at a time when Chairman Ballard's job had seemed threatened by Mayor Lindsay's impending administrative changes, the CPC had revealed the outlines of a sweeping plan for rejuvenating lower Manhattan from its southern tip to Canal Street.

But Lower Manhattan's development was also a matter of prime concern to David Rockefeller, chairman of the Downtown Business Association and his brother Nelson, Governor of the State of New York. On May 12, 1966, at a hastily convened press conference attended by Mayor Lindsay and CPC Chairman Ballard, Governor Rockefeller presented plans for a "Battery

Park City" to be built on 98 acres of landfill on the West side of Lower Manhattan at a cost of $600 million, an amount the State Housing Finance Agency had in unused borrowing power to finance middle-income housing.[12] The city's borrowing power at that time was virtually exhausted.

In explaining the plan that had been prepared by Harrison and Abramowitz, the Governor said it would help to ease New York's chronic housing shortage, draw middle-income families back to the city, create jobs in the building trades and pioneer a "new concept" in planning a total urban community. The project was to have both housing and office buildings.

The Mayor and Mr. Ballard made it clear that the city would be presenting its own plans for the area at the appropriate time. Ballard, in calling the plan "a good illustration of the way to use the waterfront," said although it had been informed, the Commission had not been consulted in their preparations.

One week later, B. Sumner Gruzen, the Chairman of the Urban Design Committee of the New York Chapter of the AIA, called the plan "a piecemeal floating dock." In commending the City Planning Commission's "terrific job of developing a comprehensive plan for Lower Manhattan, integrating the pier areas into a plan for a delightful new downtown," he suggested that any more monies available for studying lower Manhattan's potentialities should

be funneled through the CPC, "the only agency qualified to analyze the problem:

> When Mayor Lindsay releases the study Commissioner W. Ballard has commissioned Wallace-McHarg, Whittlesey and Conklin and Allen M. Voorhees Assoc. to prepare, and which the Urban Design Committee of the AIA has reviewed, I am sure the merit of this suggestion would be apprent. 13

Although the CPC's plan was widely acclaimed when it was released in June 1966, some weeks later the question was asked whether the City had the resources or the centralized authority to implement the plan? There was a covert concern even within the CPC, that other pressures and priorities would put the larger aims of the plan at the unreachable bottom of the City's list. Nevertheless, it was generally felt that the CPC plan was a bold guideline for the downtown renaissance and had superseded the Battery Park City blueprint.

Against this backdrop of rivalry between the City and the State, Edward J. Logue presented his anxiously awaited report. The report's major recommendation was to abolish the City Planning Commission and the Department of City Planning and to merge planning and developmental functions into one agency.[14] Such a unified redevelopment agency would embrace:

- The Housing Authority which administered the City owned low-rent public housing programs,
- The Housing and Redevelopment Board, which oversees Federal Urban Renewal and State Mitchell-Lama housing programs,

- The Department of Buildings,
- The Department of Relocation,
- The Rent and Rehabilitation Administration,
- The Site Selection Board.

It should also include development functions exercised by the Corporation Counsel, the Comptroller and the Department of Real Estate. The seven member City Planning Commission which had wide-ranging powers to approve capital budgets and make administrative rule changes was to be replaced by a non-salaried board of review attached to a new agency.

The report urged that the Department of Public Works cede the responsibility for selecting architects and making improvements such as streets in urban renewal areas. The new agency was to establish and enforce standards of architectural design.

All legal and practical powers to run an urban renewal program would be under one administration. Everything from the selection of a site to the repaving of streets was to be handled in one agency. Unification of the agencies would enable one man to represent the entire city program. Central office functions would be limited to overall programs planning and budgeting on a city wide basis. Nearly all the Agency staff with operational responsibilities would work in area offices. To the maximum extent feasible, operational decisions would be vested in area housing administrators.

The proposed reorganization provided considerable unrest among the city's officials.[15] The following kinds of statements were to be heard:

> Everytime there is a reorganization, people are going to get scared.
>
> The palace guard is really worried.

People very close to the Mayor feel their power threatened. One official said:

> Logue believes planning should be an arm of the action agency, in New York, we believe planning should guide development. The planning agency should be an arm of the mayor not Logue.

Commenting on the likelihood of Logue's coming to New York, the same official continued:

> He won't come without it (the reorganization) and I don't think he's going to get it.

CPC Chairman Ballard, in characterizing the CPC's function to lay down a comprehensive plan for the development of the city as an invaluable one, opposed any reorganization that would destroy his agency.

Although Mayor Lindsay asked Logue to revise his proposals so that the Planning Commission would be excluded, Logue in the final draft of the report to the Mayor, completed and published in September 1966, continued strongly to oppose an independent planning commission.[16]

> We have not been overwhelmed with the number of occasions when the CPC has asserted its independence and gone against the wishes of the Mayor's Office,

was Logue's response to civic groups that had called for keeping the "non-partisan" body. "The Planning Commission had neither been truly independent nor effective in getting its plans translated into action," he felt. "Separation of a Planning Commission from the development agency has usually guaranteed not the influence of planning, but its irrelevance." In proposing that the Planning Department be part of the development agency, Logue declared the planners should be "in the thick of the battle." But the seven member salaried CPC, in the initial report to be discontinued, was to be attached to the new agency. It was to conduct public hearings on urban renewal and other projects then held by the CPC. Preliminary hearings would be held by advisory boards in each of 10 administrative districts. Preliminary decisions on minor zoning changes would be made by the Area Administrator, while final decisions would continue to rest with the Board of Estimate. The CPC's professional planning staff was to become one of four departments.

Two thirds of $1.5 billion to be sought from Federal authorities was to be spent on the worst slums: Harlem and East Harlem, Central Brooklyn, and the South Bronx -- the City's Model City areas. Logue insisted that if the city reorganized itself, hired top professionals and asked Washington for more money, it would get it:

> There is an increasing national awareness that the municipal level of Government is being required to deal with our most important domestic crises with entirely inadequate fiscal resources, federal aid, and on a large scale is required throughout the country.

But it was widely felt that the $1.5 billions in Federal Urban Renewal Aid that was to be requested in the next six years was unrealistic. The City would be lucky to get $50 million a year.[17]

There was opposition by various groups to the absorption of the CPC, to the taking from the Corporation Counsel of the power to condemn property, to the suggestion that the agency be exempt from the Civil Service regulations, and to the suggestion that the agency draft the capital budget. The Budget Bureau felt that it should assume greater control of the capital budget than Logue had envisaged.[18]

The Mayor, in calling the Logue report "a brilliant and penetrating analysis," again rejected the idea of the Planning Commission being absorbed by a development agency. "Planning is not concerned solely with physical development and thus should not be part of the development agency." Nevertheless, he announced that he would accept most of the recommendations.[19]

Professor Charles Abrams, who had headed Mayor Lindsay's initial task force on housing policy, said:

> City Agencies have been organized, reorganized, reconsistuted and merged for years. The real question is who will be appointed and I hope that Lindsay appoints Logue. He is a good man. 20

Logue wanted the City Council and the Legislation in Albany to approve the reorganization before he took the job as head of the administration. Mayor Lindsay was skeptical about chances of getting the reorganization plan through the legislature in Albany and insisted on Logue's immediate decision. "We made a hell of a commitment to get that guy," said one official.

On November 12, 1966, David Crane delivered a background report for the Logue Study group, entitled "Planning and Design in the City". In noting that New York depended too much on mid-town and lower Manhattan, it argued that new centers of commerce, culture and community services should be built in or near slums that were to be scheduled for redevelopment.[21] It shared Logue's contention that an independent CPC would be out of the mainstream of decision making and that it should become part of a single agency that would make and carry out plans:

> The present CPC, in addition to being isolated from decision making, cannot initiate projects and must be a sitting duck, virtually rubber stamping a great majority of decisions taken by public and private forces.

In the spring of 1966, while work on the Logue Report was still in progress, Mayor Lindsay appointed a new study group to consider questions of urban design in both the private and public sector. Its report, entitled "The Threatened City", delivered in the first week of February 1967, became known as the Paley Report, after its chairman, William S. Paley, chairman of the Columbia Broadcasting System.[22] Serving on the group were:

- the architects Philip Johnson and I. M. Pei,
- Walter McQuade, architect and editor who, later, was to be appointed to the CPC,
- Jaquelin Robertson, later to become one of the initial members of the Urban Design Group and subsequently, head of the Office of Midtown Planning and Development,
- Robert A. M. Stern, later to become one of the initial members of the Housing and Development Administration's Office of Planning, Design and Research.

Both Robertson and Stern had been trained at Yale, where they had been influenced by Vincent Scully.

In urging drastic changes in the City's approach to planning, the committee recommended that the CPC be given more professional talent and power to control urban design. The creation of a 60- man urban design force of architects and planners within the CPC was urged. This force was to identify areas of particular potential allocated for specific uses in the master plan, and either draft or commission specific plans. First priority was given the completion of the long overdue master-plan, defining land uses and transportation routes. "The City Planning Commission should become the design conscience and the design brain of the city government."

The study group proposed to increase the restrictive powers of the zoning resolution and to transfer the powers of the Board

of Standards and Appeals to the Planning Commission, proposals that were endorsed by CPC Chairman Elliott.

Certain critics felt that no matter what plans the city drew, it had only limited powers to enforce them in areas where development was controlled by private interests. But Elliott and the Paley group pointed out that a Planning Commission with more professional competence would be better equipped to bargain with private interests.

While lauding Crane's report, the New York Times felt that the Paley report was overly preoccupied with traditional vistas and views.[23] Four of the authors of the report, Philip Johnson, I. M. Pei, J. Robertson and R. A. M. Stern, took issue with this view in a letter to the newspaper.[24]

Action on the Paley report was quick to follow. Elliott established Jonathan Barnett, Jacquelin Robertson, Richard Weinstein and Myles Weintraub as the nucleus of an Urban Design Group within the Department of City Planning. The four had worked together with Elliott in the 1965 election campaign of John V. Lindsay on a proposal to decentralize city government by setting up Neighborhood City Halls. Elliott instructed the four to recruit their own staff.[25]

On May 13, 1966, the Mayor said he was establishing a design unit of "bright, youthful architects" on the Planning Commission's staff to give it:

> ...a more articulate, more professional voice in shaping the face of New York...The planning task and responsibility must be placed in the hands of experts, who are at once creative and disciplined, visionary and surefooted when traversing bureaucratic terrain. 26

Next day, Walter McQuade, architect and editor, was appointed to the CPC. It was hoped that his expertise and reputation would give the city more bargaining power with private interests.

> Mayor Lindsay and the people of New York have to be congratulated on Walter McQuade's appointment to the N.Y.C. Planning Commission. It is a tremendously important step in carrying out the Mayor's firm commitment to raise the level of design in the city of New York,

wrote Edward Logue.[27] He continued:

> This is perhaps an appropriate time to say how very highly I for one thought of the Paley Commission's Report. It is certainly one of the best things of its kind that has been done for any American city - New York is fortunate to have people of that calibre as interested in this important subject.

A year before, on April 12 1966, Mayor Lindsay had sworn Samuel Ratensky to a new six year term as a member of the Housing and Redevelopment Board and on July 6, 1966, Jason R. Nathan, an able and experienced urban renewal administrator from Philadelphia, became chairman of the Housing and Redevelopment Board and also City Urban Renewal Commissioner. He had turned down an offer to become top aide to Robert G. Weaver, Secretary

of HUD, in order to assume this post. At the time it was speculated that Mr. Nathan would probably eventually head the development section of the new central agency that was to be created. However, on November 22, 1966, one year after his election, Lindsay swore in Nathan to head a new administration which was to coordinate five departments until city legislation was obtained to create a single development agency.[28] Donald Elliott became the Chairman of the City Planning Commission and of the Model Cities Policy Committee.[29]

The Lindsay Administration had decided to concentrate its urban renewal resources on the worst slum areas which had been untouched by previous programs.[30] Whereas under the Wagner administration relatively limited renewal areas on the outskirts of the slums were designated, under the new approach larger areas were designated in which planning consultants working with a committee of residents were to prepare development plans and select sites for housing and rehabilitation. These were:

- Bedford Stuyvesant and East New York in Brooklyn,
- Harlem and East Harlem in Manhattan,
- Mott Haven in the South Bronx.

In July 1967, the Housing and Development Administration was created by mayoral exeeutive order. Before gaining legal status, it had to be approved by the City Council. Although the Mayor had wanted the CPC excluded from the fusion of agencies, he

had wanted the city's Housing Authority to be part of the super agency.[31] In April 1967, he had said that the City Council, in demanding the exclusion of the Building Department and the Housing Authority, seemed to be headed toward action that would take "the guts" out of his plan to consolidate seven city housing agencies into HDA:

> Well, that's almost the guts of it, out of 12,000 employees, concerned with the subject of housing, almost 10,000 are in the Building Department and the Housing Authority, so it would be, I think, erroneous for the City Council to leave off or leave out of the reorganization, the Housing Authority and the Buildings Department. I fervently hope that reorganization would be more comprehensive than that.[32]

The Housing Authority remained a separate entity. There were to be four separate departments, each headed either by a Deputy-Administrator/Commissioner or a Commissioner:

- The Department of Rent and Housing Maintenance
- The Department of Relocation and Management Services
- The Department of Buildings
- The Department of Development

In addition, there were to be nine assistant administrators assigned to assist the administrator. Samuel Ratensky, as Assistant Administrator for Planning, Design and Research, was to act on behalf of the Administrator "in all matters of physical planning, building and environmental design."

Jason Nathan, HDA administrator, took issue with the policy of creating additional offices in the upgraded Department of City Planning, which were handling matters that, in his opinion, should be taken in hand by the agency dealing with developmental matters, namely the Housing and Development Administration. For instance, at the beginning of January 1967, it had been all but agreed that Richard Buford would be named to coordinate the numerous planning and housing agencies in the development of Lower Manhattan.[33] However, the HDA Administrator sought to block the appointment as he felt that a position should not be created within the Mayor's office to rival his own. But the Administrator was overruled and Richard H. Buford was subsequently appointed to head an Office of Lower Manhattan Development.[34]

Similarly, in September 1966, Nathan had been in disagreement with the appointment of Donald Shaughnessy, an assistant to the Mayor to represent the city's interests in an attempt to harmonize the diverging points of view of the State and the City in the development of Lower Manhattan. As these were developmental matters, Nathan was of the opinion that they should be handled by his administration.[35]

When the Housing and Developmental Administration was established a separate design office was set up whose delegated responsibilities were "to act on behalf of the Housing and Development Administrator in all matters of physical planning, building and

environmental design." Specifically, the tasks of the Office of Planning, Design and Research included:

- the formulation and maintenance of design standards,
- the development of area and concept plans,
- the conduct of design review,
- the selection of architectural planning and other related professional consultants.

It was also to undertake a program of experimental design, endeavoring to produce through the use of advanced technology, coupled with creative planning and design, more and better housing in the public sector, and to set new and higher standards of achievement in the private sector. Finally, it was to serve as a liaison between the City Planning Commission and other City Departments with respect to the City's overall design goals and their fulfillment.

The Office of Planning, Design and Research also coordinated design for New York's Model Cities vest pocket housing program.[36] Under the program, smaller housing and rehabilitation was substituted for wholesale clearance. Sites were selected in the City's three Model Cities areas by the community acting through its planners. The Housing was to be built under the Federal Programs - low rent public housing and 221 (d)(3). The City's

principal financial contribution was the land write down. Under PDR's guidance, Gruzen and Partners coordinated the seventeen architects selected by the Housing Authority to design the low rent housing. PDR worked on the establishment of overall design criteria and prepared site plans for each individual site. Particular emphasis was placed on architecture that respected the existing character of the streets and the existing scale of the neighborhood.

In 1968, for the first time since the early 1940's, low rise public housing began to be built in New York -- not free standing on huge superblocks, but as infill along streets -- in accord with the neighborhood development pattern and with the wishes of the people who lived there.

The vest-pocket housing program was the most extensive program of its kind thus far undertaken. It was not a substitute for long range planning, but rather a solution to a typical urban problem: the gradual replacement of worn out parts. It was as Robert A. M. Stern eloquently stated:

> ...an affirmation that once again it is possible for architects to contribute to the agglutinative process of urban growth and to relate wholly modern buildings to those of the past. 38

In a major way, the 1960 zoning was to be a source of difficulties. There was a collision between the off-street on site parking requirements and the usable open space requirements. These were impossible to fulfill on the type of sites

that had been selected, without resorting to expensive-to-build covered below-grade parking.

In the case of the public housing components of the program, built by the Housing Authority, the problem was not acute because a text amendment to the Zoning Resolution had reduced the required parking spaces by 25% on the grounds that poor people allegedly had fewer cars. The Housing Authority had, also, in general, secured the larger sites. In the case of the moderate-income sites to be built under the 211 (d)(3) program, however, there had been no similar reduction in required parking spaces.

H.D.A. pushed for and got a lowered OSR requirement, though car ownership is, if anything, higher in Model Cities areas than in many areas where high parking requirements still hold. Subsequently, H.D.A. pushed for permission to provide common off-site parking for several vest pocket projects.

In 1970, the low rent public housing component of the program won an award in the annual design awards of Progressive Architecture.[39] The citation noted particularly that the housing was "destined to retain neighborhood scale and character."

Planning and development had not been unified to the extent that Logue had envisaged. What leverage then, did the Urban Design Group have, lodged as it was within the Department of City Planning, to shape the spatial environment? Their principal tool was to be innovative application of incentive zoning, in a

variety of imaginative and resourceful ways.

This Chapter has reviewed the respective roles of the planning and development agencies in the management of the spatial environment over an extended period of time. It has focused on the efforts to create a unified planning and development agency along the lines of the Boston Redevelopment Authority. It has shed light on the various reasons why the proposal was opposed. It described the consolidation of a number of development-related agencies in a Housing and Development Administration and discussed the activities of that agency's Office of Planning, Design and Research, in the design of the spatial environment.

It has described the parallel development of the Urban Design Group within the City Planning Commission, and has concluded that in no small measure, the increasing use of incentive zoning may be attributable to the very fact that Logue's proposal to unify planning and development was not carried out, and that, as a result, the Urban Design Group located, as it was, in the City Planning Department, did not have the kind of large scale environmental design projects that the Housing and Development Administration was engaged in.

The formation of the Urban Design Group and the emphasis of its role, is also significant in that it is indicative of a waning reliance on the conventional urban renewal process.

Chapter 8

Guiding Urban Growth on the City's Last Frontier - The Staten Island Experience

This chapter reviews the development trends on Staten Island and describes various ways in which it was sought to influence and modify the impact of development on the spatial environment. The chapter focuses on the efforts of the Urban Design Group to improve the quality of environment through density bonuses for common open space and good site plans.

Each Spring -- the traditional moving season -- more and more people from the bursting neighborhoods of the other four boroughs move to Staten Island, where they can plant tomatoes and fly kites in their backyards. They live in thirty communities -- with names like New Dorp and St. George -- that resemble small towns. Said one young Wall Street lawyer, who was looking for a house in St. George:[1]

> Spring in Manhattan is loosening your necktie on the subway and eating hotdogs from a cart on Fulton Street. I don't want to live like that any more. Maybe I'm too nostalgic, but Staten Island reminds me of Independence, Mo., where I grew up -- there's a real small-town atmosphere here.

By the Spring of 1969, population had grown from 220,000 (1964 figure) to 310,000 and was continuing to climb fast. The accelerated migration to Staten Island began when the Verrazano - Narrows Bridge, connecting Brooklyn with Staten Island, opened in November, 1964.

The bridge drastically reduced the time it took to get to and from the island. Driving time from Times Square in Manhattan to Richmond, in the center of the island, was cut to 40 minutes.

On Easter Sunday, 1969, a woman from Manhattan drove up to a policeman on Great Kills Road and asked him to direct her to the nearest farm. "Lady, you're about five years too late," the policeman replied. "The farms are all housing developments now." The policeman was not quite correct. There were still three or four small farms left on Staten Island. Many new housing developments now line Hylan Boulevard, where $30,000 homes are set side-by-side on 40 x 100 ft. lots.[2]

"No, it's not heaven," said Irving Schwartz, who moved to Staten Island from Brooklyn in 1968. "But when robins start nesting in my apple tree, I forget that the cesspool doesn't work and that I can hear my neighbor's mother-in-law yelling at him."[3]

Between 1960 and Spring, 1967, more than 12,000 homes were built. During this boom, the city had no plan for development. A master plan, mandated in 1938, was still unfinished in 1967. Furthermore, the city, faced with budget deficits, sold $53,000,000 worth of city-owned land.[4]

South Richmond is the southern part of Staten Island. It has been described as "an unparalleled opportunity to conceive, design and bring into being a better place for people to grow, to live, to work and to play; as New York City's last opportunity to create, on a large scale, an environment for man and his family to match the richness and tradition of the world's greatest city."[5] But South Richmond is plagued by problems of premature subdivision and land speculation, which started in the 1920s. Its street patterns, lot layout, sparse utilities and unkempt condition create a host of physical and legal difficulties. Except for major arteries, most streets in South Richmond are laid out in a grid system as a result of the speculative subdivision of farms and marginal acreage fifty years ago. These streets include mapped but unimproved "paper streets." Many streets do not have adequate grades or elevations and have been developed without regard to natural terrain or drainage conditions. Designed as a "grid" to accommodate back-to-back rows of 40 x 100 feet lots, the street system, as mapped, absorbs 30% of all land.

There are approx. 12,600 different mapped parcels. Of these, 3,000 are owned by the city and are vacant. They were secured because of non-payment of taxes on portions of premature subdivisions, made during the land speculation boom of the 1920s. In terms of acreage, the City's holdings amount to approx. 45% of the vacant land. Within areas predominantly

owned by the City, there are widespread ownerships preventing assembly of substantial, contiguous tracts. Of the approx. 9,600 tracts owned by private interests, there may be as many as 6,600 different owners.

In 1966, the City, which, until then, had been selling land in Staten Island at public auction, halted its policy and declared a moratorium on such sales. This had the effect of slowing down leap-frogging development. Moreover, more rigorous health standards concerning the use of septic zones were imposed. While these measures, to some extent, resulted in arresting the deterioration of South Richmond's spatial environment, they did not reverse the trend. City services and public facilities did not keep pace even with slowed down development.

The most important part of South Richmond is Annadale-Huguenot, a 1080-acre tract bounded by Arden Avenue, Amboy Road, Wolfe's Pond Park and Raritan Bay. Vacant land is a scarce commodity in New York City. Yet almost 70% of Annadale-Huguenot is undeveloped. More than half of this vacant land is owned by the city. Left to the usual forces of development, this valuable land resource ran the risk of quickly being covered with row upon row of identical, cookie-cutter type houses, of uninspired design, arranged in dreary monotony along a wasteful grid-iron street pattern. In a process that Samuel Joroff, the late Deputy Director of the Office of Staten Island Development, has called "terricide", trees would be indiscriminately felled, ponds filled, hills leveled, and the shorefront squandered.[6]

Two zoning districts are mapped in Annadale-Huguenot. In areas designated R1 - 2, the only permitted residential uses are single family detached houses on lots with a minimum width of 60 feet and a minimum total lot area of 5,700 square feet. In areas designated R3 - 2, residential development of any kind is permitted. Detached one- or two-family houses must be on lots with a minimum width of 40 feet and a minimum total lot area of 3,800 square feet. Approx. 26 dwelling units per acre are permitted for apartment developments.

In 1963, the Planning Commission had designated the whole area for urban renewal. In that way the city could have condemned the land, changed the grid iron street pattern and the uneconomical plot sizes, and drafted a plan for development. It could then have sold the land to builders, who would have been bound by the plan.

Local opposition was fierce:

> To people here, urban renewal means apartment houses -- and Negroes. They left South Brooklyn when the Negroes moved in. They escaped here. They don't want any more people on the island. Everybody wants to be the last person to make it to Staten Island,[7]

were the words of one prominent local builder.

While the controversy raged, a group of local residents filed a suit to stop all building in the area. The State Supreme Court ruled that the City could issue no more building permits, because more construction would prevent the city from drafting a comprehensive urban renewal plan. This ruling was

reversed in January 1967. Although the decision was appealed, the Buildings Department was obliged to begin issuing permits again in Annadale and private, unplanned, construction was resumed.

In the meantime, Mayor Lindsay had decided that all available urban renewal money must go to slum areas. In February, 1967, however, he did allocate $200,000 of city money to draft a development plan for the area. Raymond and May Associates, planning and urban design consultants, of White Plains, New York, collaborating with Shankland, Cox and Associates, planners and architects of London, England, were retained to draft the plan. Raymond and May were also planning consultants for Model Cities in Brooklyn. The plan was presented to the City in October, 1967.

Four alternative planning concepts were prepared and evaluated. Concept 1 represented an upgraded continuation of existing trends. Concepts 2, 3 and 4 utilized public land assembly powers to facilitate a planned approach. While concept 2 would use single-family detached homes exclusively, concept 4 represented the maximum density permitted under zoning existing at the time.

The emphasis was on apartment development. The preferred alternative provided a variety of housing types, with an emphasis on single family development of townhouses and detached homes.[8]

In areas whose character was determined by the presence of existing one-family homes, the plan proposed 1,000 new single-family detached houses, generally on 60 x 100 foot lots. Wherever possible, the new houses were to be clustered and a portion of the individual 60 x 100 foot lots utilized to form common open spaces.

Most of the proposed new housing (3,750 units) were to be attached town houses and grouped in small residential clusters of varying design. Each family was to have private outdoor space, as well as use of common open spaces, which it would share with its neighbors in the same residential cluster. Each town house cluster was to be part of a series of neighborhoods, each containing between 600 and 1,000 homes, with convenient access to local shopping.

Each neighborhood was to include one or two 11-story point block apartments, in order to provide housing for young adults, older couples whose children had grown up, and other families preferring such housing. There were to be 400 such apartments, with 40 to 80 apartments in each neighborhood. It was thought these apartments could, for example, house families who no longer needed all the space provided in a town house, but who desired to remain in their own neighborhood to continue established friendships and interests.

A 65 acre shopping and residential complex, including 25 acres of filled land jutting out into Raritan Bay, around a 40-acres man-made lagoon, was to serve as a focal point for the community. Around the lagoon, the plan envisaged 1,200 dwelling units, "in terraced apartments cascading down to the water's edge," and town houses with individual boat mooring facilities. Two point block apartment towers were to mark the harbor's entrance. To make this possible, it would be necessary to place the already planned shorefront Expressway on an inland alignment, rather than along the water's edge as initially proposed.

A pedestrian walkway and open space system, independent of vehicular circulation, was to knit the entire Annadale-Huguenot community together. Each residential cluster's open space was to be maintained by an association of homeowners. These individual green areas were to be tied together by a continuous pedestrian greenway, linking homes, shops, schools and large public parks. Existing streams and ponds were to become the nuclei of a neighborhood park system, winding through the entire community and culminating in the waterfront center.

The walkway system was designed to provide a series of different experiences as it passed cluster housing groups, crossed the central park and expressway to ultimately reach the community center and bay.

A walk through the new community would typically begin in one of the residential clusters. Each of these areas provided a place for young children to play, and a sitting area for adults, away from heavy traffic. A pedestrian path connected this open space with the neighborhood shopping area (accessible by car from the collector road) and passed the point block tower at the neighborhood center. The shopping plazas were to have decorative pavements and changes in level separating shoppers from those relaxing and browsing. They were to be brightly lit, with banners flying and the splash of water in fountains. Clusters of trees would provide shade.

As the path continued, foliage alternately hid and revealed groups of homes of varied design and layout. Each residential cluster was carefully fitted into the existing topography; whereever possible, existing trees were preserved. Eventually the path joined another pedestrian route running through a park containing a "fenway." Walk intersections were marked by changes in pavement, special lighting and benches. Colorful information kiosks gave directions to pedestrians and announced current events, meetings, movies, plays and other items of community interest. Public benches complemented by secluded sitting areas, were provided. The "fenway" was part of a system of natural streams and lakes which have been preserved and utilized as a component of a new storm water drainage system.

The pedestrian path led on to the central park, which

included an open meadow, an amphitheater set into the hill at one end of a lake, and a lookout tower at the highest point -- a visual reference point for the entire area. The amphitheater provided a setting for concerts and plays, the lake for row boats and fishing, the hills ~~as~~ a setting for sledding. An arboretum's plantings marked the changing seasons. There were playfields, tennis courts and picnic areas.

The expressway and Hylan Boulevard, which bordered the park on the south, had a pedestrian bridge at this point. The walkway then continued on to the community center, passing a group of houses that had been retained, and, on the left, a school, a church, a new fire house and the police station. It passed under the loop traffic road and emerged in the community's shopping mall on the lagoon.

The vehicular system was to have five parts. An expressway was to provide long distance connections of a borough-wide or regional nature. Hylan Boulevard, an existing major artery, was to act as a pair of one-way service roads for the expressway, and was to be the major highway link between the community and other nearby sections of Staten Island's south shore. Three local intersections between Hylan Boulevard and a loop traffic distributor were planned. The loop traffic distributor would connect the residential neighborhoods with one another, provide access to the major shopping area and the promenade on the lagoon. This road would also provide access to Annadale and Huguenot,

the areas two rapid transit railroad stations (which connect with the Manhattan ferries). The loop road protects existing houses from the effects of the traffic generated within the new development. Each of the residential neighborhoods was to be served by a collector street, connected to the loop traffic distributor. The collector streets would serve the local stores and each of the small residential clusters. Finally, the individual homes would be reached by means of local streets.

In August 1966, the Mayor accepted a recommendation of the Planning Commission to create an Office of Staten Island Development. As director, he appointed Holt Meyer, a former law partner and his campaign manager in the borough, to coordinate the work of city departments, negotiate with builders, suggest capital projects and develop procedures for controlling expansion.

Typical of the problems of the borough is the story of a builder, who owned 70 acres in the "heartlands" section of the borough. Since the tract was not served by city sewers and septic tanks were expensive and inefficient, the builder asked permission from the City Planning Commission to build a private sewage treatment plant. After lengthy negotiations, the builder agreed that in exchange for permission, he would change the street layout in his development, from a monotonous gridiron pattern, to a network of curving and cul-de-sac streets.[9]

Moreover, the city wanted to build narrow public parks along several streams, one of which ran through the builder's property. The builder agreed to preserve the stream for one year, but said if the city did not build the park, he would cover it up.

The Department of Public Works objected on the grounds that uncovered streams were dangerous and only agreed to study the proposal after six months of negotiations. The contract with a consultant to study the park plan was then blocked by the Controller, who said it allowed too much for the consultant's expenses. In another instance, the city allowed a builder to put in a sewage treatment plant and the builder donated a three-acre school site. Mr. Meyer then wanted the builder to design a more attractive street pattern, but he refused. Mr. Meyer said:

> We have no leverage left in that case. About the only way we'll get him to agree is if he wants something else from us, like a zoning change. Then we can bargain with him. 10

Bargaining with builders to change their street and site plans can have only a small impact on the growth of Staten Island, Holt Meyer said. More sweeping controls were needed, especially in South Richmond, where 8,300 acres remain vacant.

In Spring, 1967, with urban renewal dead in Annadale, city planners believed the best alternative would be a quasi-public development corporation. Using the vast city landholdings as collateral, the corporation could buy up land -- not only in Annadale -- but in all of South Richmond. It could, then, change street patterns and plot sizes, and either resell it to

responsible builders, or bank it for future use.

"This is the year of decision for Staten Island," Holt Meyer said in April 1967. "Every day another acre of vacant land is lost." Building had almost halted in the previous year because of high interest rates and the court decision, blocking new construction in Annadale-Huguenot. In 1967, interest rates turned downward, and the Appellate Division of the State Supreme Court lifted the building ban.

In the Summer of 1966, an advisory group had told the city: "Our image as a speculators and spoilers paradise is in great measure due to straight-jacket zoning regulations."

One architect, of low density residences, said the present zoning resolution represents a rigid straight-jacket for development. Because it tries to define everything, it provides for an army camp appearance. It allowed little imagination on the part of the architect.

In a "rubber stamp style" both the City Planning Commission and the Zoning resolution attempt to treat all of the boroughs as if they were on the same plane, and that plane is Manhattan.[11] A member of the N.Y.C. Department of City Planning said that standard R3 zoning was viewed as "pollution on the island." It represented the city's inability to deal with builders given a mapped street and sewer. As much of Staten Island is mapped, as well as served, by sewers, the city had virtually no power over a developer who wished to build under R3 regulations.[12]

Zoning is only a tool to implement a scheme. However, Staten Island was not "planned-zoned" -- there was no scheme. It developed itself. The city merely zoned according to existing conditions, making official what was already there. Staten Island's portion of the city's master plan developed to accommodate "the city's wish to have a plan."[13]

The most demanded residential form on the island, is a fully detached, two-family house. It offers most of the qualities sought in a suburban house. In 1969, a family, with as low an annual income as $13,000, could probably finance it, due to the $150 per month credit allowed by most banks for the second rented dwelling unit.[14] The builders contend that they erect what the public wants. Daniel L. Master, a leading real estate broker, said:

> The responsibility for the kind of development we have here lies with the public. We'd like to preserve trees and make larger lots, but we have to sell houses. The average man is a civil servant from South Brooklyn. He can't pay for all these things, although builders would prefer to put them in. The public dictates standards. The builder only puts up what he can sell. [15]

Conventional development on Staten Island is built on what is called R3-2 land. Houses are either one- or two-family, and have front yards of 15 to 20 feet, rear yards of 30 feet, and two side yards, one 5 feet and one 8 feet. The yard requirements in the Zoning Resolution, serve a dual purpose: To provide light, air, and open space and to provide for off-street parking. The requirements in the 1961 Resolution

accomplish the first, but have become progressively more inadequate for the second. Cars have become larger, car ownership and the number of two-car families have increased, and the convenience of the front driveway, has resulted in its use as a parking space, despite its inadequate size. The required front yard for R3 and R4 is 15 feet. As a result, the typical 18 foot long car encroaches on the sidewalk. The basis for the combined 13 foot side yard requirement, was to make one side yard at least 8 feet wide. The wider yard was intended to allow a driveway along the side of the house, to provide either a side parking space, or access to a rear garage. The 8 foot allowance is no longer adequate because cars are too wide. As a result of these lot requirements, density for conventional development is from 10 to 20 dwelling units per acre, depending on one- or two-family units. The housing market has been heavier on the two-family houses, because it gives a buyer the ability to buy a house and rent one of the units to help pay the mortgage.[16]

Nevertheless, the two-unit row house is rarely built, because a two-unit building of marketable size is legal only at R5, where far more profitable non-complying three-unit construction is taking place. Only a very small part of the island was mapped R5.[17]

Houses are built on 40 x 100, or 60 x 100 feet building lots, and are generally on 200 x 600 ft., 200 x 700 ft., or 200 x 800 ft. lot blocks double loaded. On a 60 ft. lot, two

two-family semi-detached buildings would be feasible. The apartments usually have one large two-bedroom or three-bedroom apartment, generally owner-occupied, and a smaller rental unit, usually one bedroom. Based on construction costs at the end of 1969, and varying land values, the sales price ranges from $40,000 to $65,000, and the required down payment from $14,000 to $22,000.[18]

On April 21, 1967, Elliott announced that the Board of Estimate would vote on planned unit development provisions on May 24. In August 1967, the Board of Estimate adopted a City Planning Commission's recommendation, extending the zoning resolution's large-scale provisions to cover low density residential areas. Under the new law, the Planning Commission might waive technical requirements, such as yard regulations and height restrictions, to permit dwellings to be built close together in clusters, leaving substantial land areas in a natural state. In addition, the Commission, with the approval of the Board of Estimate, was to be able to grant bonuses of extra floor area, to developers, in return for good site plans, or the provision of common open space.[19]

Although the Planned Unit Development regulations were to be applicable in many parts of New York City, they were primarily intended for Staten Island, which contained more than half of the City's vacant land.

The City Planning Commission was to be able to authorize the following modifications to the zoning regulations, provided that the overall plan was satisfactory to the Commission.[20]

Bulk regulations:

- Floor area and dwelling units, rooms, or rooming units, may be distributed without regard for zoning lot lines.
- Open space may be distributed without regard for zoning lot lines.
- Lot sizes may be reduced.
- Yard regulations may be waived within a development.
- Height regulations may be waived within a development, provided that regulations governing the spacing of buildings were satisfied.

Use regulations:

- Convenience shopping, restaurants and certain other types of consumer services, may be permitted within residential areas, provided that the Commission was satisfied that they represented an amenity and provided that the total area devoted to such uses was no more than 2% of the overall floor area permitted in the development.
- Outdoor swimming pools may be provided in the common open space, provided that their use is restricted to residents of the development and that the pool is located at least 100 feet from the development's boundary, except that it can be located not less than 50 feet from a boundary street, if it is adequately

screened from the street.

Bonuses given by Special Permit:

The Planning Commission, subject to the approval of the Board of Estimate, might grant bonuses of additional floor space to the developer, for a good site plan, with or without the provision of common open space. The bonus for a good site plan is applicable in R1 - 2, R2, R3 and R4 districts, and can be granted within the following limits:

- The required open space may be reduced by 10%
- The required lot area per room, or the lot area required per dwelling unit, may be reduced by 5%
- The allowable floor area may be increased by 7.5%

The bonus for common open space is applicable in R3 and R4 districts and can be granted within the following limits:

- The required open space ratio may be reduced by 20%
- The required lot area per room, or the lot area required per dwelling, may be reduced by 10%
- The allowable floor area ratio may be increased by 15%, provided that 20% of the total open space (or one acre, whichever is greater) be given over to common open space, and provided that the site design would have qualified for the good site plan bonus.

James G. Sweeney, a member of the City Planning Commission, speaking for Mr. Elliott, had told the Board of Estimate that the CPC had taken steps to allay the fears of many builders that

cluster-zoned communities might be delayed because of bureaucratic snarls attendent in getting mapping and drainage changes. "To ease problems," Mr. Sweeney announced, "the Department of City Planning has been working to establish procedures which would enable builders to get speedy approval from the appropriate City departments." He added:[21]

> We are preparing a booklet which should be ready in two or three weeks, to guide builders through the necessary steps and outline standards for planned unit development communities.
>
> We will accompany each planned unit development permit with a listing of the necessary reviews needed by other city departments. We will also indicate how long these reviews should take. Thus a developer will be able to gauge the time by which he should be able to begin work.
>
> We also will commit the CPC to act on a developer's preliminary submission within 45 days or receipt. We hope these steps will show a developer that we are just as eager as he is to see his project completed.

The new planning techniques were not mandatory, but members of the City Planning Commission expressed the hope that many builders would take advantage of them.

Key members of the Urban Design group principally concerned with the preparation of the guide to Planned Unit Development, included Michael A. Dobbins, Jonathan Barnett, Frank A. Rogers; with the assistance of the late Samuel Joroff, who was Chief of Planning, Office of Staten Island Development; Norman Marcus, Counsel, City Planning Commission; and Millard Humstone, Principal Planner, Department of City Planning. It was released on May 1,

1968, by the Commission's chairman.[22]

The guide stressed a number of features that it expected to be of great value to the developer and builder. These were:

- fewer and shorter streets,
- more efficient utility runs,
- better drainage, less site preparation,
- more sales flexibility in house types,
- more dwelling units and bigger houses,
- and ability to include shops and stores.

The same features would also benefit the resident of a Planned Unit Development, the guide emphasized:

- Since P.U.D. permitted the builder to offer houses on smaller lots, a house in a P.U.D. could cost considerably less than a comparable house on a larger lot. Concurrently, the easing of yard restrictions in P.U.D. permitted the builder to construct a larger house on a conventional lot. In consequence, the guide argued, a larger house, for less money, was a very real possibility under P.U.D.
- P.U.D. encouraged town houses, garden apartments, detached houses, and atrium houses, all of varying sizes, to be built in the same development. This meant more choice of house types, more variety of family size and income level in any given area, and allowed families to move from one type and size of house, to another, without leaving their old neighborhood.
- In that P.U.D. permitted as much as 30% of the land area to remain in its natural state, while housing the same number of families as conventional development and some times even more,

natural features such as ponds and rock out-croppings, as well as trees and streams, could be preserved near the places where people live.

At the same time, the guide pointed out all houses continue to have their own private open space, which might well be larger than conventional backyards. The land saved for open space is land that would ordinarily have been devoted to "unusable side yards and unnecessary streets."

- Open space created by P.U.D. could be used for recreation areas, like playing fields and swimming pools and there can easily be extra open space for schools and community facilities. The new law allows such facilities to be designed as an integral part of the residential neighborhood, instead of being in their own separate locations.
- The community open space of P.U.D. could be used to create pedestrian greenways connecting houses with schools and larger open areas. Such greenways could be designed so that they cross few or no streets, providing safe routes for children to walk to school, or play space.

While the intersection of two conventional "gridiron" streets created 16 potential places, where a collision could take place, the neighborhood loop streets possible in P.U.D. could have as few as three potential collision points. Moreover, the clear distinction between through traffic streets and neighborhood streets, made possible by P.U.D., provided a generally safer

traffic pattern, with fewer cars moving more slowly in the areas where people live.

- In conventionally zoned areas, shops can only be placed in sections with commercial zoning. P.U.D. permits small groups of shops and restaurants in the middle of residential areas, giving the kind of convenience often found in the center of cities, but seldom in outlying residential districts.

An actual site in south Staten Island was selected to illustrate the full range of site planning opportunities possible under the P.U.D. amendment. Four alternatives were investigated and compared with a conventional proposal for development of the site.

A conventional scheme for development accommodated 1427 single-family houses on about 205 acres. Houses were placed according to zoning lot requirements, on a street system previously adopted by the City.

The Urban Design Group described the result as: "a disastrously barren environment, and all of the natural character of the site is destroyed."

The first two alternatives that were investigated, showed developments of about the same density as the conventional proposal. The third alternative showed a scheme of somewhat higher density that could accommodate an increased demand for apartment units. The fourth alternative showed how a maximum number of units could be developed, using apartment houses.

Scheme 1 showed the potential of clustering 1431 town houses on collector streets. The scheme had a horseshoe loop street system, which eliminated through traffic, used a minimum amount of land for streets, provided a large common open space in addition to the open spaces defined by individual clusters.

Scheme 2 showed varied house types on loop streets. Detached houses, semi-detached houses, town houses and town house apartments, totalled 1445 dwelling units. They were arranged around a P - loop street system, in which each loop served only the houses on it. Within each loop, there was a common open space. The loops together enclosed a large parkland running along the ridge and into the center of the site.

Scheme 3 anticipated changing market conditions during the course of a development time span. It assumed an initial development similar to the previous scheme, in the northern, lower portion of the site, and then a transformation of the market into apartment units. Three and four-story maisonettes perched on the crest of the ridge, backed up by six-story terraced apartment buildings. Rising out of the expanded shopping at the south center of the site, was a square apartment tower of twenty-stories. A total of 2800 dwelling units were thus accommodated on the site. In addition to the surface parking, a sizeable amount of parking was contained underneath the terraced apartments and shopping center. More open space was provided than in Schemes 1 and 2, in recognition of the increased density.

Scheme 4 had an overall total of about 4500 units. The apartment types consisted of three- and four-story town houses and maisonette apartments; five, six and seven-story terraced apartments; and major apartment structures stepping up from four-stories, to as high as twenty-eight or thirty-stories. The built mass was arranged in three wall-like megastructures. Around the periphery of the site were extensive recreational facilities. A very considerable amount of land was left in its natural state.

The application procedure for a P.U.D. generally was to have two stages. The first stage is a preliminary submission and response. The second stage is a final submission and formal action by the City Planning Commission.

During the preparation of the preliminary submission, the sponsor was encouraged to keep the Commission informed of his progress and to consult with the staff if any questions or problems arose.

The preliminary submission was to be made up of both drawings and written material. Graphic materials required were extensive:

- A site plan showing existing features: Contours at five intervals, location and diameter of all trees 6" in diameter and larger, location of watercourses, ponds, and streams, existing structures, and roads, and any other features, such as large rock outcroppings, which might be distinctive or unusual on a particular site. Scale: No less than 1"=160'.

- Site sections sufficient to indicate the major site profiles, presented at the same scale as the site plan.
- An architectural site plan showing proposed streets, lot sizes and shapes, parking, curb cuts, all pedestrian ways, placement of buildings and lots, community facilities, and open space location and treatment. Scale: No less than 1"=160'.
- Drawings or models indicating the three dimensional character of the proposal, in an accurate way -- either perspectives, sections elevations, axonometrics, or isometrics in any combination, or at any scale, that is appropriate for communicating the character of the proposal.
- Required only where a new or altered street plan is included, as part of submission, were preliminary street and drainage plans, showing alignment of streets and direction of flow of storm and sanitary sewer in relation to topography. Where an official street and drainage plan exists, it should be submitted for purposes of comparison.
- Preliminary plans of house types proposed for development. Minimum Scale 1/8" = 1'.

The written part of the preliminary submission was to contain:

- A statistical summary of proposal, including gross site area; street area; net site area; number of each variety of dwelling unit, and total number of dwelling units; floor area per dwelling unit type and total floor area. Common open space area and total open space area; and number of rooms per

dwelling unit type and total number of rooms.

- Staging plan: a general time schedule of expected completion dates oe elements of plan.
- Financial plan: a general description of the intended means of financing the development.
- Size and scope of shopping facilities, if any.
- Size and scope of any other community facilities.
- Preliminary ownership and maintenance plan of common open space, if any.
- Certification of ownership of property.

Within 45 days of receipt of a complete preliminary submission, the Commission is to tell the sponsor whether a final submission is encouraged. At this time also, the Commission is to make known any conditions to be included in the final submission, such as allowance for community facilities or the need to accommodate street plans to those of adjacent areas. Moreover, the Commission may request that certain documents be submitted to the Commission to facilitate coordination with other City Agencies.

In the final submission, all the drawings from the preliminary submission had to be resubmitted in an up-to-date form. In addition, when street and drainage plans are to be altered, complete drawings conforming to the requirements of the Borough President, the City Planning Commission, the Department of Public Works and other appropriate City Agencies must be submitted at this time.

The written material was to be resubmitted in final form. Within 45 days of receipt, the Commission was to either grant administrative approval or fix a public hearing. Any substantial changes from an approved plan would be subject to the same procedure as new submissions.

Howard Diamond, Architect for Waterside, one of Staten Island's first P.U.D.s, pointed out that developers and builders are often not the same person. The building industry is going to move in a direction of greater specialization. Land speculators will continue to assemble land. Developers will plan an entire project, install the utilities and streets, and then sell chunks to small builders.[23]

In December 1969, Larry Simons, the developer of Waterside, in noting that builders are by nature very conservative people, said the marketability of a P.U.D. is, at this point, questionable. The concept really hadn't been tested:

> Large builders can afford to experiment with new things much easier than the smaller ones, because they are not really playing with their own money; its their stockholders. But included in their operating procedure is a safety factor which covers them for a mistake now and then.

Large builders can more easily accept the wait involved in dealing with the city, he said.[24]

A developer working under P.U.D. must allow for 12 - 18 months in delays. One of the major contributing factors to this, is the necessity to deal with mapped streets. If there are no mapped streets on the site, the administrative time required is

reduced. The need to process the demapping of old rights-of-way and remapping of new, necessitates action by the Board of Estimate, which represents one of the largest single chunks of time. This is really what density incentives try to compensate. The demand for town house type units will probably continue to increase, and when the administrative procedure for processing a P.U.D. is polished down a bit, "then the necessary wait will be worthwhile." The time required could be economically justified.

Nationally, land costs represent 10 - 15% of the total cost of a house. In New York (Staten Island) land represents at least 20%. Twenty acres of land on the island, bought at builders terms, might represent a $1 million mortgage. This means $90,000 per year in carrying charges (taxes and amortization) or $7,500 per month. This is very hard for all but the largest builders to carry.[25]

When choice is reduced to a minimum, such as under the standard R3, the developer's job is somewhat simplified. No time is spent deciding which direction promises the greatest return. On the other hand, however, if demand had fallen off for the standard R3 type before P.U.D. "developers could have killed each other off, competing for what would have been left of the market."[26]

When choice to the builder is increased, then, as with the addition of P.U.D., a safety valve for the developer is provided.

The land for Waterside was first acquired in 1965. Due to the

controversy over the proposed Staten Island expressway, the project was hung up administratively. By 1966, when changes in the design of the road were made, money was starting to tighten up to a point where garden apartments were no longer possible. In 1968, Waterside was forced into becoming a P.U.D. because the physical properties of the site precluded a standard R3 development. Had it not been for the complete lack of choice, a P.U.D. probably would not have been built there.

It has been difficult to bring P.U.D. units in at a low enough price to compete in the same market as the standard R3 house. Due to the costs of delay (taxes, mortgages, increasing labor costs) and to the additional requirements under P.U.D. (landscaping, etc.), a three bedroom Waterside unit will cost $36,900, as opposed to the more conventional R3 unit at approx. $29,- 30,000. Waterside will have only 53 units. Arden Heights, however, will be much larger, with approx. 2000 d.u.s. Due to its size, there may be a chance to bring the price per unit down by a considerable amount.[27]

> There are two ways to approach the marketing of a P.U.D. Costs can be held down low enough to effectively compete with standard R3, or it can be made attractive enough and expensive enough to appeal to a much higher market. In between is very bad...it wouldn't appeal to anybody. Waterside is now in the second category. It wasn't originally intended to be, but costs were forced up to a point where it fell between the two. Since an inexpensive unit was no longer attainable, the price had to be increased (by adding equipment such as air conditioning, etc.) to the next plateau. In order to get the necessary financing, a family of four will have to have at least an annual income of $17,000.

The most demanded residential form on the island, a fully detached, two-family house, offers most of the qualities sought in a suburban house and, although the price approaches that of a Waterside unit, a family with as low an annual income as $13,000, could probably finance it due to the $150 per month credit allowed by most banks for the second rented dwelling unit. In trying to decide between a P.U.D. and a more conventional form, the developer must decide exactly what market he is after, both in economic level as well as housing type. If the P.U.D. is intended to compete with apartments, it has quite a bit to offer. However, if it is directed at the standard R3 market, it does have some shortcomings in the traditional sense. Privacy, for example, is reduced in P.U.D.'s.

P.U.D. must realistically offer a much upgraded form of living at competitive prices if it expects to draw those people who would otherwise not move to Staten Island. One of the additional requirements of a P.U.D. unit is that it be completely landscaped. This represents an increased cost from $100 per unit in standard R3 to $400 per unit in P.U.D. In order for a development to take advantage of P.U.D. programs, it must provide for parking other than just in front of each house. Moreover, more open space is needed than just the accumulation of chunks thrown in by each standard size R3 lot, which really doesn't have that much to contribute. Higher rise structures must, therefore, be mixed with lower rise town houses.

On May 1, 1969, the Planning Commission set the date of May 14 for the mapping of streets for a P.U.D. in the Arden Heights section of Staten Island:

> The street mapping lays the foundation for a new kind of development in New York,

D. H. Elliott explained;[28]

> Trees, and the rest of the natural environment will be preserved in a community that is free of traffic hazards, with its own large recreation area.

The 168 acre area to be remapped was the same area that the Urban Design Group had used to show various P.U.D. options in its booklet.

But three months later, on August 21, the Board of Estimate voted to hold off action on the development, because one of the maps required from the CPC had not arrived. This was attributed to administrative technicalities.

Next Spring, on March 4, 1970, Loew's Corporation Hotel and movie theater operators, announced plans for construction of 2,025 single-family homes in Staten Island. The development was to consist of nine clusters, each with 225 houses, surrounding a 35 acre private park. Laurence A. Tisch, chairman of Loew's Corporation, said at a luncheon attended by the Mayor at the Regency Hotel announcing the start of Village Greens:[29]

> Because we're abandoning the conventional street grid, we can plan an environment for living close to nature. Until now, this hasn't been thought possible in an urban setting...
> We intend to build a community of town houses (on Staten Island) with an environment you cannot find near large urban centers -- especially Metropolitan New York.

Norman Jaffe, the architect, explained that the project's origins could be traced to changes in the city's zoning resolution, accomplished in 1967, making P.U.D. development possible. The developers said that Village Greens owed a great debt to the New York City Planning Commission, and particularly to its Urban Design Group, which had fought for controlled environmental planning on sizeable tracts, such as the one in Arden Heights.[30] Jaffe relates how:

> ...the original scheme called for small groups of dwellings related to their own small open space. These groups, in turn, surrounded the large major open area. The City's criticism of this scheme was very constructive, suggesting that the smaller spaces could be related to the larger ones in such a way as to increase its effective size...which improved the scheme while still respecting the basic concept.

There were to be 13 d.u.s. to the acre.

A green belt was to run through the center of Village Greens, with the nine villages arranged around it, in a style that was described as being reminiscent of small New England towns. The architecture of the houses was to reflect this feeling with stone and white painted clapboard to be the most prominent exterior materials.

Jaffe said the town houses would be of contemporary design, but that he intended them to be natural and "comfortable" in feeling -- hence the predominance of wood and stone for the exteriors.

Courtland Paul, the Californian landscape architect, said his theory in landscaping was "to try tinkering as little as possible with the natural attributes of the site." Jaffe and Paul planned the site with what they described as "meticulous care" and sought to preserve its character of rolling woodlands. Where trees had to be removed, they were shifted elsewhere or other trees were planted to compensate them. "We walked the site and we listened to it," Jaffe said. "We tried to relate its development to the surroundings, to the area's past history, and to the experience of new life styles that are influencing what people want in their communities."[31]

The P.U.D. concept presupposes that all necessary services will be supplied, when residents move into the houses they buy. Mayor Lindsay noted that in some other parts of Staten Island, homeowners had complained bitterly about the lack of connections needed to link into the city sewerage systems. A shopping center was to be started on an adjacent 6.5 acre site. Borough President O'Connor said a public school would be built on land set aside in Village Green.[32]

The $80 million project was a joint venture of Loew's and J. H. Snyder Co., a Los Angeles Building firm. The developers were to finance construction themselves, without backing from a large lending institution. The houses were to range in price from about $29,000 for a three bedroom unit, to $39,000 for four bedrooms. The developers expected to draw the first income by Sept. 1.

Tisch said his company's business was "holding up very well." Other such single-family units were under consideration in different parts of the country. "We intend to be a major factor in the housing business," Tisch said Staten Island offered a rare opportunity because of the vacant land, making development possible, without uprooting existing homes.[33] "Frankly, we haven't any answer to the relocation problem," he said, "if we did, we might build in more crowded parts of town." The developers hoped that Village Greens would contribute toward preventing middle-income families from forsaking the city for the suburbs.[34]

Subsequently, in 1971, Loew's Theaters and Hotels proposed a 440 unit garden apartment planned unit development in the Grasmere section of the island.[35]

At public hearings held on a P.U.D. proposal for a cluster of apartments on the side of Grymes Hill in north Richmond, owners of surrounding single-family homes expressed fears that the development would turn into a cheap speculative venture.[36] John Poll, head of a "realty consultants corporation," proposed a 135 unit condominium complex, rising as high as 6 stories on the wooded 5.6 acre site. The apartments were estimated to cost $60,000. A spokesman for the neighboring residents announced that 90% of them opposed the P.U.D. Poll was described as primarily a land speculator who "rarely holds land for a year." The question was asked how the project would be downgraded if the $60,000 units did not sell.

The chief protagonist for the proposals was Christopher Chadbourne, director of the City Planning Commission's Staten Island Office, who argued that under existing zoning, Poll could strip the hill site of its trees and put in 54 homes on narrow 40 foot lots. With a P.U.D. a loop street could be provided and most of the trees saved.[37]

The Southgate P.U.D. promised "all the delights of suburban country living right within New York City." In this P.U.D. most of the homes were either detached or semi-detached. Nevertheless, three quite substantial parks were provided within widened rectangular blocks.

- "The Richmond" was a two-family fully detached house. It was a so-called "mother-daughter" home. These homes were popular because they provided a smaller apartment to the rear of the first floor, frequently occupied by a parent or parents of the couple that lived in the master apartment. The cost: $60,000.
- The "Savannah" was a two-family semi-detached house, with a "master apartment" and a rental apartment, a so-called six-over-six.
- The "New Orleans" was a two-family fully detached six-over-six unit.

Arnold Kotlen, in charge of P.U.D.s at the Staten Island Office, attempted to achieve a hierarchy of different sized spaces, by increasing the percentage of attached houses, by setting some detached houses back from the street, while placing others at right angles to the street.[38]

Peter DePesce, President of the Rosemear Organization that had built over 900 homes in Nassau and Queens Counties, however, claimed that it was necessary, from the point of view of marketing, to have the main orientation of all the homes facing onto the street. He also resisted any increase in attached homes. Arnold Kotlen, in noting in December 1972 that he had spent 3½ years working with P.U.D.s and that he could talk for days about the problems and weaknesses of them, wrote: [39]

> For the first three years, our biggest problem with P.U.D.s was in time delays in processing applications through the various City agencies. The Mayor then formed the P.U.D. Implementation Council, which is made up of the heads of the various City agencies.
>
> The purpose is to be involved at the beginning of a project and help to avoid the problems which we have found, that can happen at the lower levels of government. This Council has helped a great deal in its short term of existence.

One of the purposes of the P.U.D. regulations is "to protect and preserve scenic assets and natural features." There are, however, several shortcomings which limit what can be achieved.

- P.U.D.s are optional and have not been utilized extensively.
- Patterns of property ownership, especially those which include many small or moderate sized holdings, are more likely to yield a crazy quilt pattern of common open spaces, rather than any significant contiguous natural area.
- The amount of common open space that can be pooled from individual lots is limited by the need for retaining a minimal standard of open space per dwelling unit on the individual lots themselves.

- Where building types are confined to detached or semi-detached houses, considerations of privacy limit the degree to which open space can be pooled.

The experience of Village Green indicates that the larger planned unit developments are generally better able than the smaller ones, to achieve a high quality of site planning and provide sizable chunks of open space, than the smaller ones.

Under New York City's P.U.D. regulations, common open space is privately owned and maintained for the benefit of the residents. Many other communities take a different view and either allow or require all common open space to be deeded to the municipality. Some communities reserve the right to acquire or not acquire common open spaces in each case, as deemed appropriate.

While it may well be appropriate that open space serving local needs should be private and that the City should not be burdened with maintaining it, some natural areas may possess considerable value as a recreational resource. The public should have access to such areas.

The rolling hills of Staten Island's Greenbelt constitute such a potential natural resource. A district plan should designate those areas to which the public should have access and show the natural features to be preserved.

Development plans for areas within such districts should be reviewed.

In order to encourage the assemblage of sites in excess of ten or fifteen acres, some bonuses should be withheld from developments on smaller tracts. By encouraging or mandating large planned unit developments, chances of combining the open space into a system in accord with a district plan, could be enhanced.

In conclusion, some additional observations are in order.

- P.U.D.s and the utilization of the bonuses, while increasing common open space, may lead to a reduction in the range of housing types. The bonuses tend to work toward favoring of the attached row house.
  Attached houses in rows are not particularly suited to the inclusion of a rental apartment, often a prerequisite precondition in the decision of a family to acquire a house because the rental will reduce the expense of house aquisition. Thus the measures may ultimately reduce the range of people who can afford to move to Staten Island. A case in point is the Arden Heights P.U.D., where there is an overwhelming preponderance of row houses without rental apartments.
- Without wanting to derogate from the laudable concept of open space (common open space paid for in the form of reduced private space), there is a mounting body of evidence that sizeable amounts of utilizable private open space is an

increasingly cherished asset in order to both "plant tomatoes and fly kites in their backyards."

Taking this into account, it might be also desirable to consider policy measures to enhance the usefulness of the open space of the typical 40 x 100 and 60 x 100 lots. In certain situations, zero side and front lot lines might be considered. This could enhance the usefulness of the remaining open space. It would, of course, call for certain specific designs. Another way to increase the flexibility of the typical 40 x 100 and 60 x 100 foot lots would be to provide incentives for pooled offsite, but nearby, parking.

- Although the Urban Design Group worked out exemplary techniques and aids to expedite the processing of P.U.D., good site plan and common open space bonus applications, the fact remains that the principal beneficiaries will still tend to be the major developer with a large scale of operations, because of the considerable amount of time that is still needed for processing in spite of the efforts of the city to reduce the time needed.
- Although the Urban Design Group went to considerable lengths to make clear what it understood by good site plans, the concept still is overreliant on administrative discretion. Moreover, the examples the Urban Design Group shows in its booklet do not include a variety of examples for smaller and intermediate sized parcels.

- Given the fact that many streets - "paper streets" - are already mapped and sewered, an additional avenue for the city to explore would be, rather than to demap and remap entire sections, to proceed more parsimoniously by making incremental modifications to the existing basic system prior to redevelopment. There is a wider range of options in such a process than might be expected at first glance. For instance, loops and cul de sacs could be created to deter through traffic, streets could be jogged, superblocks could be created by demapping just one street and so on. Such an approach would have the added advantage of enhancing future adaptability in the event, for instance, of development to higher densities with garden apartments or elevator apartment buildings.

  The approach would be helpful for the smaller builder as well in that time would be saved and the pressure to assemble large contiguous parcels would be alleviated.

  Finally, it would reduce the cost of moving from the inner city to the suburbs, while at the same time maintaining the high standard of quality of the surrounding spatial environment.

Chapter 9

Take-Off at Times Square:
The Special Theater District - Process and Issues

This chapter examines what was at issue in the creation of the Special Times Square District. This district was the first of the Special Districts in which expanded use of density incentives was applied.

In 1965, the Times Tower, a wedge shaped sliver of a building on a site bounded by Broadway obliquely intersecting 7th Avenue and facing onto Times Square, was reconstructed. It was rechristened the Allied Chemical Tower. Some observers saw that this was the initial catalyst to the redevelopment of the Times Square area. "There was a breakthrough," said Robert W. Dowling, the financier, "that put the stamp of approval of a great American company on the entire area."[1]

Since 1904, when it was put up in the heart of the theater district at Times Square on a site on the west side of Broadway between 44th and 45th Streets, the Astor Hotel had lodged stage stars, producers and other celebrities. In 1958, an investment group, Astor Associates, bought the hotel from William Zeckendorf, whose company, Webb and Knapp, continued to lease and operate it. When W. & Ks. over-extended financial obligations forced it into bankruptcy proceedings in 1965, Astor Associates took over operation of the hotel.[2] The following year, in 1966, the property was sold for about

$106 million to Sam Minskoff & Sons, office and apartment developers, who planned to erect an office building on the site. From the point of view of zoning, the site constituted a split lot.

At the time that the property was acquired, the first 200 feet west of Broadway was mapped for FAR 15, whereas the remaining 150 feet of the 350 deep site was located in a buffer zone; approximately 30,000 sq. ft. or a little less than 50% of the entire plot of 65,760 sq. ft. was in an area which would only yield to a builder 2/3 of the rentable area in a FAR 15 district.

On May 5, 1966, Minskoff's architects Kahn and Jacobs submitted, on behalf of their client, a written request to the City Planning Commission that the entire plot be mapped to a FAR 15 designation.[3] Granting of the request would "result in considerable benefit to the area and to the City -- in improving the appearance of Times Square," the architects asserted in noting that it was the intention of the owner to erect "a building of notable architectural adornment."

Millard Humstone, of the Department of City Planning, drew up a report arguing against remapping on the grounds that the subway system was already overburdened, that sidewalk pedestrian congestion was already too great.[4] The request was denied by CPC Chairman William Ballard, a holdover from the Wagner Administration, who had gone out of office in the previous

fall. Sam Minskoff had been a major contributor to the new mayor's election campaign. Ballard was succeeded by Mayor Lindsay's new appointee, Donald H. Elliott. Subsequently on November 30, 1966 the CPC, in noting that the requested extension of the FAR 15 area would provide an increase in the permissible floor area, "in harmony with current trends of development in the Times Square area, and that Shubert Alley would continue to remain open as a private right of way," reversed the former denial.[5]

This would permit addition of approximately 170,000 sq. ft., equivalent to the amount of space that could, in a FAR 18 district, be built on 9,444 sq. ft. of land. At a prevailing land price of $300 per sq. ft. this amounted to a bonus of $2,833,200. But in 1966 the mortgage market collapsed and Minskoff could get neither financing nor a primary tenant.

Richard Weinstein, one of the first architects in the New York Department of City Planning Urban Design Group which was established in May 1967, relates how its first members were just settling into their jobs when an application for a zoning change on the site of the old Astor Hotel was brought to their attention, i.e. the Minskoff property.[6] "Someone told us," Weinstein relates, "that Mayor John Lindsay liked the legitimate theater and was afraid that an office-building-boom on Broadway would lead to the destruction of the theater district. Wouldn't it be nice,

we thought, if somehow we could build a new theater on the Astor site?"

At the start of World War II, there were 47 legitimate theaters in the Broadway area.[7] By 1967, the number had fallen to 34. The last Broadway theater that had been built was the Carter, which opened on Sixth Avenue at 49th Street one block east of Times Square in 1932. It was demolished in 1954. Most theaters were built before 1930. The oldest theater was the Hudson on 44th Street east of Broadway, dating back to 1903. Closed and about to be demolished was the Playhouse Theater which had stood on West 48th Street between the Avenue of the Americas (Sixth Avenue) and Seventh Avenue since 1911. The Ziegfeld Theater at 54th Street and the Avenue of the Americas had been demolished to make way for a 50-storey skyscraper. Three other playhouses, the Morosco on 45th Street, the Helen Hayes one block north and the Alvin on 52nd Street, all had been acquired or were in the process of being acquired by real estate interests. The theater in the Paramount Building was being turned into office space.

Initially fire regulations called for theaters to be free-standing. Because of improvements in fire fighting methods and construction technology, the regulations were changed so that theaters could become part of other structures.

Due to the concentration of free-standing theaters in the Broadway District, densities were low. Yet most of this area was mapped for densities of FAR 15 and with bonuses, 18, while the portion west of a line 200 feet west of Broadway was mapped at an FAR of 10, with bonuses, 12. Consequently, incomparable potentially achievable density differentials lured as an incentive to redevelopment. It was felt that a shift in the office building boom from the East Side to the West Side could wipe out the entire theater district. "We quickly learned," Weinstein relates, "that the power of advising the City Planning Commission on questions of zoning was of great interest to developers."[8]

The Urban Design Group began negotiations with the Minskoffs for a new legitimate theater as part of the office building complex. James Felt, acting as a consultant, advised that no bonus was necessary, but that if one were to be granted, it should not exceed 10%. However, Minskoff, an astute business man, argued with the Planning Commission that to put in a theater would be economically injurious to him because of the cost rise in construction.

At the third of a series of meetings, the developers were told that the most they could get was:

- a FAR bonus of upto 44 percent above the base level of 15 (or 20 percent above 18, the current ceiling) with concurrent dispensation from the requirement to provide a plaza;
- and waiving of height and setback regulations.[9]

There is conflicting testimony as to how the bonus was arrived at. One story has it that Minskoff had gone downtown to the CPC with the 20 percent figure for the bonus in expectancy of a big battle, and that he had been surprised to have been granted a 20 percent bonus outright.[10]

The bonus program evolved early in the Summer and after a meeting in August with Mayor Lindsay, the Minsoffs agreed to the proposal.

Numerous alternative building configurations were tested by the Urban Design Group.[11] Through an interactive process with the developer's architects, Kahn and Jacobs -- Der Scutt, the chief designer for the developers' architect was an old classmate of Weinstein's -- the final design was arrived at. But before the agitation for the 44% bonus could be considered, it was necessary to amend the zoning resolution.

Also in early summer of 1967, the Uris Capitol Corporation was advancing plans for an office building on a plot 89,475 sq. ft. in size (approximately 25,000 sq. ft. larger than that of the Minskoff property) at a location on the west side of Broadway from West 50th Street to West 51st Street. This lot, too, was a split lot. The first 200 ft. west of Broadway was mapped for a FAR of 15, or with bonuses, 18, and the remaining 250 feet -- approximately 49,000 sq. ft. or little more than 50% of the entire plot of 89,475 sq. ft. -- was in a C6 - 5 (FAR 10) area, an area which would only yield to a builder 2/3 of the rentable area in

a C6 - 7 area.

On July 27, 1967, i.e. at a time when the negotiations with Minskoff were underway, Uris requested a remapping of the 49,000 sq. ft. of his property from a C6 - 5 (FAR 10) to a C6 - 7 (FAR 15) to give him approximately 245,000 sq. ft. of additional rentable area in his proposed building.[12] 245,000 sq. ft. of additional floor area is the equivalent (in a FAR 15 district) of the grant of 13,611 sq. ft. of land to Uris, which at $300 per sq. ft. equals a sizeable bonus of $4,083,300.

The CPC suggested that a theater be included in the project. Uris agreed and on August 29, 1967, Percy Uris wrote to the Planning Commission that:

- remapping to a C6 - 7 District (as against relief to be granted by the then proposed but not yet publicized Theater Amendment) could be accomplished within sufficient time to enable Uris to move forward with their project and that therefore remapping of the site should be undertaken without delay;
- in return the building, when constructed, would provide without charge against the FAR for a 1500 to 2000 seat legitimate theater.[13]

On November 9, 1967, the Commission remapped the site as a C6 - 7 district (maximum FAR 18) "in recognition of its potential for high density development."[14]

How did these mapping changes relate to previously enunciated mapping policy?

- In the case of 1 Astor Plaza, the remapping constitutes an indentation 200 feet wide extending 125 feet into the C6 - 5 buffer zone (FAR 10). Approximately half of the block remains mapped at FAR 10.
- In the case of the Uris site, however, the buffer zone of FAR 10 is completely severed.

Some remapping drew accusations of gerrymandering" from the owners of abutting or adjacent properties.[15] Opposition came from the two Shubert owned corporations:

1) Trueuhs Realty Co. Inc., owner of real estate (the Winter Garden Theater) located directly across Broadway from the Uris zoning lot;
2) the Affiliated Theater Building Company, sole owner of property adjoining the Minskoff zoning lot (Shubert and Booth Theaters).

On September 21, 1967, a Planning Department staff memorandum[16] recommended against a theater district amendment on the grounds that:

- zoning must be rational and text and map changes must be able to justify the privileges granted to individual developers;
- there was no plan;
- the excessive bonus would set an undesirable precedent.

Nevertheless, next day, the general purposes of a Special Theater District were announced.[17] Under its key provision, the Commission, by special permit after public notice and hearing,

subject to Board of Estimate action, might authorize in any new building in the Special Theater District containing a legitimate theater(s), a discretionary increase in the permitted floor area ratio not to exceed 45 percent. The precise extent was to depend on the applicant's handling of the provision of:

- a legitimate theater or theaters, of a size and type which the Commission deemed appropriate under the circumstances, pertaining at the time of the application, in order to achieve a balance of facilities responsive to the needs of the district;
- facilities supportive of legitimate theater operations, such as rehearsal, studio or storage space;
- open spaces, arcade, subsurface concourses or subway connections which will ease congestion in the area by aiding in the circulation of pedestrians or vehicles;
- restaurant facilities or other amenities useful to the Special Theater District;

> ...and which will not have operated to reduce light and air in its surrounding area or to reduce the total number of legitimate theaters, except under circumstances where the Commission shall find that such reduction will not be harmful to the future of the special district.

The Special Theater District was to include the following[18] specific purposes:

- preserve, protect and promote the character of the Special Theater district area as the location of the world's foremost concentration of legitimate theaters -- an attraction which helps the City of New York achieve preeminent status as a

cultural showcase, an office headquarters center and a cosmopolitan residential community;

- help insure a secure basis for the useful cluster of shops, restaurants and related amusement activities which have been attracted to the area based upon its past and present character;
- retain and improve the special employment opportunities generated in the area which compliment and enhance related City-wide employment-generating activities and which might otherwise become scattered and diffused outside the City to its detriment;
- to develop and strengthen a much needed circulation network in order to avoid congestion arising from the movements of large numbers of people, among them, convenient transportation to, from and within the district, and provision of arcades, open space and subsurface concourses;
- provide an incentive for redevelopment of the area in a manner consistent with the aforegoing objectives which are an integral element of the Comprehensive Plan of the City of New York;
- provide freedom of architectural design accommodating legitimate theaters and supporting activities within multi-use structures, which should produce more attractive and economic development;
- promote the most desirable use of land in this area in

accordance with a well-considered plan to promote the special character of the district and its peculiar suitability for uses related to the legitimate theater and thus to conserve the value of land and buildings and thereby protect the city's tax revenues.

The Special Theater District was to be bounded by 40th and 57th Streets, the Avenue of the Americas (Sixth Avenue) to the east and by a line running in a north-south direction at a point midway between 8th and 9th Avenues. Don Elliott predicted a rebirth of the Theater District.

On October 18, 1967, the CPC held a public hearing on the proposal. Although residents in the area were concerned about relocation, support for the measure was strong. Bernard Jacobs, an attorney for the Shubert organization which controlled 17 Broadway theaters and owned a half-interest in another, expressed reservations and subsequently detailed his objections in writing.[19] Jacobs argued that the amendment had been hastily contrived and ineptly drawn and was being presented primarily to meet the commercial requirements of the Uris and Minskoff zoning lots without a prior study of the prevailing needs of or economic conditions in the theater or of the impact that subsidized new theaters would have upon the theatrical community as a whole.

On October 30, 1967, the League of New York Theaters, an organization of the theater owners and operators, submitted a written statement in support of the Shubert's position.[20]

The League called for provisions

- ensuring permanency of the theaters incorporated in new office buildings;
- compelling builders receiving a bonus to share the financial benefits with the tenant operator of the theater or with the producer by establisging a reasonable rent for the theater;
- encouraging owners and operators of existing legitimate theaters to continue to operate, maintain and improve their properties by means of relief in the form of lower assessed values and lower tax rates.

The League noted that up until then, if a theater owner or operator made substantial improvements to a theatrical property, the only assurance that he had was that the improvement would result in an increase of his assessed valuation.

Lawrence Shubert Lawrence, head of the Shubert enterprises, said that the amendment as it stood really was "a windfall for the builder," an observation that prompted Elliott to remark on Nov. 8, 1967, that "if he owned 17½ theaters, he wouldn't be happy with this change either."[21]

Mr. Lawrence noted that his organization had resisted opportunity after opportunity to tear down its theaters and construct office buildings, because of his feeling that theater was important. Asked whether the Shuberts might not tear down some present theaters and install new ones in more profitable buildings under the new program, should it be approved,

Mr. Lawrence said: "We might just consider it, we might do it anyway."[22]

Chairman Elliott assured the League that the amendment did contain guarantees against later conversion of a legitimate theater in that to get a change, the builder would have to come to hearings before both the Commission and the Board of Estimate. "We know what the commission's intent is and we think we have the muscle to maintain it," said Elliott.

He noted that the Commission would not fix rentals and that he was not sure what a "reasonable rental really meant," but added that he thought the answer to what was reasonable should come with the natural operation of the open market.[23]

In her dissenting report entitled "Brightlights and Bottlenecks or Will Bonus Conquer All?", Commissioner Spatt said that before the amendment could be approved, four questions needed to be answered:[24]

1) How will the 44% bonus (FAR 21.6) affect pedestrian and vehicular circulation?

2) How will parking problems be resolved?

3) What must be done for the present resident population?

4) Is a maximum of 44% necessary and is it a good precedent?

On November 1, 1967, after further consideration, the Commission, in noting that the tenor of the public hearing had generally confirmed the results of the Commission's investigation of the conditions in the theater district and its evaluation of

the need for the present proposal, voted in favor of the amendment. Dissent was expressed:

> Even supposing the idea of a Special Theater District were adopted, the Citizens Union feels that such districts should be encouraged in other parts of the city rather than in Midtown Manhattan, where overbuilding is already rampant, and any concessions beyond the bonus already provided for plazas and arcades should be avoided." [25]

In a motion[26] by Bronx Borough President Herman Badillo, the Board of Estimate hearing on the proposal that had been scheduled for November 9 was laid over until December 7. He said more time was needed for the Board members to familiarize themselves with the issues.

Spatt argued[27] that the Minskoffs would be getting the 20% bonus that builders normally received for the provision of extra open space in the Central Business District, without providing the free and open space, along with the 20% for including a theater. Actually, the 20% for open space is based on an FAR of 15, which brings the total FAR normally applicable upto an FAR of 18. The 20% of the theater bonus is calculated as 20% of an FAR of 18. So, in fact, taking the base level of FAR 15, the sum total of the bonuses adds up to 44% of the as-of-right allowable bulk.

This was the basis of the Shubert's assertion that the proposal would provide a windfall. The builder, having received the extra space, would be able to make much lower rental deals with the producers.

28

With respect to public circulation, Mr. Elliott said the bonus formula would also be used to obtain improved pedestrian and vehicular circulation, provision for arcades, subway connections and uses, which are supportive of the major functions of the district. Without modifications, the as-of-right applicable plaza bonus regulations would result in an indiscriminate proliferation of plazas, largely accidental to the needs of the district. On the Astor site, the Minskoffs' first proposal included the usual plaza, which entitled the developers to the 20% bulk bonus. The Commission was of the opinion that at that specific location opposite the already open space of Times Square, pedestrian arcades and a glass gallery over Shubert Alley represented an equivalent public amenity in terms of circulation space at ground level. Such spaces would protect ticket queues and taxi hunters from inclement weather. (This does not take into account that the plaza bonus was also intended to encourage wider spacing of buildings to improve light and air. True, one side of the building faced onto Times Square, but it also faced on two sides 60 foot wide side streets.)

The additional 20% granted only through a special permit is intended to encourage the otherwise uneconomical construction of theaters. Elliott pointed out that on the Astor site, which is a relatively small plot, the theater would eat into the office space in such a way as to justify compensation by the complete

bonus. On the Capitol site, which was larger, the theater would stand clear and no bonus whatever will be granted beyond permission to build the theater itself. (However, an FAR of 20.8 was approved. The bonus portion was in return for circulation improvements).

On December 4, 1967, a few days before the crucial Board of Estimate hearing, Mayor Lindsay, in a letter[29] to the Citizens Union's executive secretary, responded to that organization's opposing views:

- In maintaining that no unprecedented high renaissance of dramatic arts can affect land values to the point where owners will erect legitimate theaters in place of (or inside of) office buildings, Lindsay claimed that: "Without a proposal of the kind that the city is now considering, the private midtown office building boom will, in a matter of years, wipe out the present legitimate theater district."
- Moreover, the theater district and allied entertainment functions such as television, are dependent on proximity for effectiveness.
- If this unique web of theater-related uses "were to be destroyed", a unique cultural and economic resource of the City and the Nation "would be scattered."
- In response to the Union's contention that an undesirable precedent would be set, the Mayor, in noting that new needs

were emerging, said that new techniques were being created to satisfy them, and he "never felt that New York City could be governed by a static set of rules promulgated at one time."

Chairman Elliott, in his present release of December 7, 1967,[30] said:

> To assist the Planning Commission in weighing applications for special permits...there will be a group of recognized professionals from all segments of the theater industry, who will work with our new urban design group to formulate specific details and requirements for each theater and its related areas.

Chairman Elliott further stated in the release that the special permit when issued "will spell out in detail all of the space and related requirements of each theater -- the number of dressing rooms, amount of rehearsal space, necessary equipment and so forth."

Late in 1967, at about the same time that the Theater District amendment was adopted, Robert Dowling, head of the City Investing Company, sold[31] through a subsidiary, the Astor Theater Corporation, a 53,000 sq. ft. plot immediately to the north of Minskoff's combined office-theater building. The plot that included the entire west block front of Broadway between 45th and 46th Streets and extended 348 feet deep along 45th Street was large enough, under the revised zoning, for a building containing 1 million sq. ft.

The plot that included the Morosco Theater, on 45th Street and the Helen Hayes on 46th Street, as well as the Astor and Victoria film houses, was acquired by Peter Jay Sharp, a leading

developer.

At the end of February 1968, Sharp had not yet made any plans for construction. "When we do redevelop it," he said, "whatever we build will undoubtedly contain at least one new theater." Mr. Sharp said he had been encouraged by talks with members of the Planning Commission.

"I was pleased to find an attitude rather than a rule," he said. "They give the impression...and I think they are quite sincere, that they want to maintain the theater district where it is and make it more interesting and exciting."

A second plot, paralleling the Astor site to the south, was big enough for a large building without any further assemblage.

Early in January 1968, Robert W. Dowling, the financier, predicted a major renaissance on Broadway.[32] "We've only seen the start of the renaissance so far. It's nothing like the evolution that is coming."

The first month of 1968 saw a number of developments that would pave the way for a new skyscraper:[33]

- Toffenetti's restaurant, on the south east corner of Broadway and 43rd Street, was sold to an investing group;
- the East block front of Broadway between 44th and 45th Streets, containing the Criterion Theater and Bond's and Woolworth Stores, was sold to the Durst Organization, a prominent builder-owner of office skyscrapers;

- the southeast corner of Broadway and 47th Street was sold to the Bowery Savings Bank;
- a realty operator, Charles B. Benenson, contracted to buy the northeast corner of Broadway and 43rd Street, a two-storey building containing a Schrafft's restaurant and several small shops.

To the south, the run-down movie houses of 42nd Street and their companion sub-rosa book stores were under great pressure.

On April 10, 1968,[34] the CPC held a public hearing on the subject of the special permits - required under the Theater District Amendment - for the two projects on the site of the former Astor Hotel and on the site of the Capitol Theater.

The Shubert interests' attorneys continued their opposition:[35]

- Discretion should not be exercised by the Planning Commission to grant Uris and Minskoff additional FAR bonuses because of the significant and extremely valuable bonuses previously granted to them.
- The FAR bonuses were excessive and would afford Uris and Minskoff a discriminatory and unfair advantage over existing non-subsidized theater owners or operators.
- The additional Theater District bonus requested by Minskoff to supplement the previous remapping bonus would yield 236,736 sq. ft. of additional floor area, which in an FAR 18 District was equivalent to 13,161 sq. ft. of land, amounting, at $300 per sq. ft., to a subsidy of $3,948,300.

- The additional Theater District bonus requested by Uris to supplement the previous remapping bonus would yield 279,165 sq. feet of additional floor area, which is the equivalent (in a FAR 18 District) of 15,509 sq. ft. of land, having a market value, at $300 per sq. ft., of $4,652,700.
- The market value of the total bonuses, including the remapping bonus previously granted and the Theater District bonus now applied for, requested by Minskoff, was approximately $6,781,500 and by Uris approximately $8,736,000.
- Theaters could be constructed only on unusually large plots, because building an office building over a theatrical auditorium would be too costly to contemplate. Except for the Uris and Minskoff plots, there was not a single plot in the Broadway area, they claimed, large enough for a theater to be constructed on it in conjunction with an office building without overbuilding, nor was there, the attorneys claimed, much likelihood that such parcels could be assembled by any prospective builder. According to their studies, redevelopment of the Broadway Theater site (38,000 sq. ft.) or the Winter Garden site (22,000 sq. ft.), two Shubert properties, could not be accomplished under the amendment as enacted.

> If no property owner other than Uris and Minskoff can benefit from the Theater Amendment, then not only is that resolution private and discriminatory legislation for them alone, they argued, but the ideal of providing over the next generation a new group of attractive theaters for our community will never be met.

- The applications represented the demands of two successful commercial builders who had had little exposure to the legitimate theater. "In fairness to the community as a whole, their applications should be denied and a comprehensive study of conditions in the legitimate theater should be authorized immediately. Until such a study were completed, no applications for special permits should be considered under the Theater Amendment."
- The attorneys contested the Planning Commission's interpretation of Section 74-72 of the Zoning Resolution that states the CPC in specified districts:

> May permit modifications of the height and setback regulations for developments or enlargements located on a zoning lot having a minimum area of 40,000 sq. ft. or occupying an entire block.

Minskoff and Uris requested the following modifications under Section 74-72:

- The area of the tower exceeds 40% of the area of the zoning lot (46% for Uris and 43% for Minskoff)
- The area of the tower within 50 ft. of West 50th Street and West 51st Street exceeds 1875 sq. ft. in the case of Uris, and the area of the tower within 50 ft. of West 44th Street and West 45th Street exceeded 1875 sq. ft. in the case of Minskoff.
- The height of the front walls of the theater portion of the structure exceeds 85 ft.
- The front walls of the theater portion of the structure do not have the required initial setback distance.

The attorneys argued that if the relief requested by Uris and Minskoff was essential to permit construction of an office building and theater under the Theater Amendment, then the Theater Amendment was, in effect, limited to plots in excess of 40,000 sq. ft., which, given the limited number of plots in the Broadway are exceeding 40,000 sq. ft., was another indication of the discriminatory nature of the Theater Amendment:

- "No open space bonus should be granted except for open space actually provided and certainly no Theater District bonus can or should be granted predicated upon an open space bonus which does not relate to open space actually provided."
- No group had been organized to work with the new "Urban Design Group" to formulate specific details and requirements, neither did the plans indicate that the space and related requirements of each theater had, in fact, been spelled out as required.

But on April 11, 1968, the Mayor announced the appointment of two committees to advise the Commission, one on general policy for the Theater District, and the other for work on the development of individual projects. This was a formalization of an already ongoing process, in which members of the actual community had reviewed the design policy and planning standards. The CPC responded to the Shuberts as follows:[36]

- In noting that the waiver of height, setback and tower regulations, provided the Commission finds an improved design resulting from such waivers without significant effect on surrounding light

and air, was authorized several years prior to the creation of the Special District for lots of 40,000 sq. ft. or over, the CPC observed that a developer was free to seek the Theater District bonus without such assemblage.

- Recognizing the special problems and opportunities of the area, it was the judgment of the Commission that a number of preferable alternatives to plazas existed, such as the theaters themselves, improved subway connections, concourses for off-street taxis and automobile lanes, protected pedestrian ways.

Of the two buildings, only the Minskoff Building received a bonus for the inclusion of a theater.[37] Uris had already agreed to the theater at the time of the remapping.[38] Consequently, much less was at stake for the Uris venture than for the Minskoff building.

The Minskoff building, on the smaller site, had a complex intermingling of functions.[39] It was necessary to separate the office building from the theater as there would be a temporal overlap of occupancy when matinees were held. There was also the psychological factor to consider in getting tenants. The theater crowd was to enter from Broadway at street level and also from an arcade between 44th and 45th Streets. To get to the offices, one would go by escalator to a lobby on the 2nd floor.

The office portion of the development was to be on the westerly part of the plot and was to rise 32 storeys. The portion of the development fronting on Broadway was to house two floors

of commercial uses and a legitimate theater, having a seating capacity between 1,600 and 1,800 seats. There was to be a five-storey lobby overlooking Times Square through a glass wall ringed with balconies.

A 1,500 seat movie theater was to be located below grade under the legitimate theater. Three restaurants are also contemplated for the development. One restaurant was to be located on the legitimate theater roof with a terrace overlooking Times Square, a second restaurant fronting on a widened Shubert Alley, the third restaurant on a pedestrian arcade lined with shops running through the building, parallel to Shubert Alley.

Whereas in the case of the Astor Building it was the theater itself that received the bonus bringing the FAR up to 21.6, in the case of the Uris building it was a block-long underground concourse extending west from the IRT station on Broadway to the IND 50th Street station on Eighth Avenue that earned the bonus, bringing the FAR for the Uris Building up to 20.8.[40]

It was possible to enter the office tower or theaters from either subway without getting out of doors. Restaurants, retail stores and other consumer services were to be provided on the concourse and street levels of the development.

After thorough review[41] of all the factors involved, the Commission found that there was "justification to increase the permitted FAR to 21.6 as requested by the applicant and to modify the height, setback and tower regulation as requested" provided

"the development went forward substantially as proposed. If the office tower portions of the premises were completed prior to the theater, the certificate of occupancy should be limited to a maximum floor area ratio of 18."

Uris planned two legitimate theaters on the westerly portion of the zoning lot. The large theater, to be located above grade, will contain between 1,600 and 1,800 seats. A smaller experimental theater with a seating capacity of between 350 and 650 seats was to be constructed below grade under the larger theater. It was anticipated that the experimental theater would have several performances during the course of the day. One-act plays or small revues might be staged during lunch hour and at about 5.30 p.m., with performances of straight plays in the evening.

The theater entrance and lobby were to open onto a 40 foot wide arcade running north and south through the development and linking two plazas which adjoin the office tower on West 50th Street and West 51st Street. Stairways leading up and down to both theaters were to be located in the lobby. The arcade was to be bordered on its westerly perimeter by a 30 ft. lane for automobiles and taxis. The plans also called for two sunken plazas on the Broadway frontage with direct connections to the IRT subway. The station will be open to direct daylight from the plazas.

The two developers agreed[42] "to periodic progress reviews with the CPC on the design of the theater...in the course of which, with the applicant's concurrence, the Commission might make minor changes, modifications, amendments to the standards and specifications, as long as they were consistent with the purpose of the amendment."

On the Uris site the theaters stand clear of the actual tower, reducing construction costs and providing very large floor areas of 40,000 sq. ft.

The Uris-Capitol Building on the site of the former Capitol movie theater was to be a 44 storey tower on a 89,476 sq. ft. site, containing 1,861,000 sq. ft. for which an FAR of 20.8 was set or a bonus of 5.8 above the district base of FAR 15, excluding the 107,900 sq. ft. of theater space provided. One Astor Plaza was to be a 55 storey tower containing 1,420,508 sq. ft. on a 65,764 sq. ft. site for which the city set an FAR of 21.6, in exchange for 76,900 sq. ft. of theater provided.

On April 25, over the continued opposition by attorney Bernard B. Jacobs representing the Shubert interests, the Board of Estimate approved permits that would let Astorill Associates and the Capitol Corporation go ahead with their projects.[43] Spokesmen for the Investing Builders' Association, Inc., and others said the proposed theaters were much needed improvements.[44] Although Manhattan's Borough President had voted for the legislation in the Fall, Manhattan's vote was now cast against the two

permits.[45] Leonard N. Cohen, Manhattan's Deputy Borough President sitting in for Borough President Percy Sutton, said the city had done much over the years to encourage big builders and not enough for smaller builders.

According to Der Scutt,[46] who designed One Astor Plaza for Kahn and Jacobs, the architects, the Minskoffs were in 1970 secretly very bitter about One Astor Plaza because they had to throw out a design that they had had prepared by Kahn and Jacobs adhering to the zoning regulations prior to introduction of the Special Theater district legislation. The site was probably too small, at 65,000 sq. ft. The theater had to be packed into the office space which necessitated expensive trusses to support the weight of the tower. Der Scutt said it was absolutely wrong to think that the developers were in any way getting a windfall profit. With the additional steelwork and trusses, the building was much more expensive than anticipated, costing several million dolllars more. Moreover, the added time involved had led to the Minskoffs missing the rental market that was very strong when they conceived their initial plans.

Der Scutt said the incentive zoning to stimulate theater construction failed because it was not able to computerize additional costs:

> If the Urban Design Group can put as much specific effort into determining the actual FAR incentive as they have in envisioning the broad scope of the idea -- that is, into implementing the process into uncovering the hidden complexities of incentive zoning and making it fair and

> equitable, this will prove the most brilliant urban planning idea of the decade.

What seems to be the problem according to the co-designer[47] of the American Place Theater in the new Fisher Building is that:

> The formula determining what the builder must provide in return for the bonus to be granted must somehow be made more exact. With construction costs rising at the rate of 3 percent per month in the city, a developer cannot afford to spend the time to negotiate a lengthy agreement in the way the city now requires.

The Regional Plan Association lamented[48] the plight of the relatively low height area of the theater district -- threatened in 1967 by an influx of high building. In 1967, the theater district provided a vivid visual contrast to the office towers to the east, by virtue of its smaller bulk and the fine-grained detail of its activities. The area was a strong orientation element. Low buildings permitted major focal points outside the area, such as Rockefeller Center, Grand Central Station, Park Avenue, to be seen and recognized from within the area.

Such low areas have an important functional as well as visual aspect. The Times Square area harbored a wide mix of needed and specialized activities, ranging from printing to the theater and including a host of eating places, large and small, and scores of stores.

A spokesman for the Regional Plann Association expressed doubts on bonuses for theater as they would tend to encourage very expensive theaters, suitable primarily for musicals.[49]

> Renting new theaters is going to be more expensive and thus there is a danger of pushing theaters out of the Broadway area. The developer would then apply to the CPC for permission to convert his theaters to offices. Even if the theaters were successful the activities relying on low cost space that provide so much of the diversity and uniqueness of the area, music stores, electronic stores, inexpensive cinemas, restaurants, book stores, will be driven out.

The Theater District legislation substantially enhanced the potentially achievable intensity-of-use differential, and consequently contributed to accelerated change. Concomitantly, it was an active deterrent to keeping up the low intensity-of-use in the area.

On one of the midtown blocks where major office structures were going up, 22 small restaurants had been dislocated. Carlisle Towery, an urban designer with RPA, found out[50] that some of the small firms doing business prior to the changing of the area could even have met the high payments for rents demanded by the major developers. However, these developers wanted larger clients. The proliferation of small clients was too much trouble. "Corporations look for image. The builders keep hitting their winning combination: glass buildings and marble banks. The banks pay high rent, take long leases, close early - no garbage, no rats. They're ideal tenants for prestige," said Carlisle Towery.[51]

In consequence, even with the theaters, Broadway would still only be a repetition of the Avenue of the Americas. The zoning bonuses offered by the city for including theaters in office

buildings can still produce a "clutch of routine office buildings," and the continuing spread of what the Regional Plan Association labeled slab city.

RPA warned[52] that the "gradual creep of offices threatens to produce massive single purpose areas." Such areas are a "vacuous visual environment." The city needs to keep focal "low points" among its "coalescing peaks," the powerful clarity and identity of CBD clusters such as Grand Central and Rockefeller Center are endangered. "If the theater district is replaced by office slabs due to short term pressures, the cost will be felt in the long run...The preservation of low areas among the high has both economic and amenity benefits for a headquarters environment."

RPA suggested[53] an alternative future for the area, in which it envisioned Times Square as a tree lined plaza, full of signs with chiefly modern, low buildings and Broadway closed to vehicles from 59th to 23rd Streets.

RPA would have liked to have seen a leapfrogging of Broadway and 7th Avenue and encouragement of growth at 8th Avenue and West of 8th Avenue. Instead, the march westward of offices is being slowed down by the great incentives offered for office construction by the theater district legislation, which discourages keeping up the low intensity uses and accelerates rebuilding in the Times Square area.

In spite of the predictions of the Shubert Interests' attorneys that no more projects would result from the Theater District legislation, they did lead to plans for a fourth new legitimate theater. On September 25, 1968, the City Planning Commission scheduled a public hearing on plans to include a new home for the American Place Theater in a new office building.[54]

Fisher Brothers 47th Company filed an application for the grant of a special permit involving modifications of the height and setback regulations, and authorization to increase the permitted floor area ratio for a proposed development, on a zoning lot of 42,049 sq. ft. located on the west side of the Avenue of the Americas from West 46th Street to West 47th Street.[55]

The flexible 300 - 400 seat experimental theater was to be below street level with access from a 50 foot wide pedestrian plaza running through the block from 46th to 47th Street. It was intended that the theater operate 52 weeks of the year with performances possible at lunch hour, at 5.30, 7.00 and 9.00 o'clock. A restaurant was to be located in a structure bridging the through block pedestrian connection and a sidewalk cafe was to front on the pedestrian walk.

The office portion of the development was to be set back 10 ft. from the property line on the Avenue of the Americas and 15 ft. on the side streets, and to rise 42 stories above grade plus 2 floors of mechanical penthouses.

Because the site was less than half the size of that of the Uris development, it was necessary for Fisher Brothers, in order to achieve an economic floor size, to increase tower coverage. They filed for an increase under section 74-72 of 14% from 40% to 54%.

The applicant was to construct a basement concourse from the Sixth Avenue (Avenue of Americas) subway entrance and West 47th Street to a line beneath the lobby of the office tower from which it will be accessible by escalator. A corridor of space was to be reserved extending southward through this basement to connect with future concourse developments. The system would therefore permit pedestrian movement northward through the basement concourses of projects planned to the north and connecting to the Rockefeller Center concourse system.

The applicant requested[56] the Commission to authorize, pursuant to the provisions of the Theater District Amendment, Section 81-06 of the Zoning Resolution, an increase in the permitted floor area ratio to 20.8. The request was granted under the condition that the maximum FAR be reduced to 20 not later than Dec. 31, 1974, through demolition of existing structures on the lot.

In the Summer of 1969, on July 24, the New York Times published an article[57] entitled: "Planners Ask: Will Success Spoil Time Square?" in which the views of key developers and public officials

were quoted. The general tenor of the article was that precipitate change was imminent.

- "The change has begun in the theater district," said Robert W. Watt, president of the Broadway Association. "Let me tell you, its going to go faster than Third Avenue, faster than Sixth Avenue."
- "Times Square is ready for change," said Henry H. Minskoff, who foresaw "a new office and cultural center that will make the Square much more attractive, pleasant and comfortable." He believed that this and other new buildings would replace the "hodgepodge of small buildings and narrow sidewalks. A touch of the old glitter will remain," he thought, but the whole square will be "lifted to a new level of beauty and taste."
- "I would be very much surprised if in the next five to ten years roughly every site facing Times Square is not rebuilt," said Richard Weinstein of the Urban Design Group and one of the prime movers behind the Theater District legislation.

Although the Mayor's office welcomed change,[58] it said it did not want to see the sure-fire Times Square formula that attracts millions ruined. "The thing about Times Square that is so wonderful is its haphazard vitality, its virile intense kaleidoscopic variety, its popular low brow vulgarity..the 20th Century ought to be able to have a great outdoor Fun Palace."

A sizeable portion of the new construction within the Times Square area was not availing itself of the special bonus provisions. One major office building directly across from 1 Astor Plaza was started substantially later than 1 Astor Plaza but was completed much earlier. No special permits were sought under the Theater District Amendment by the developers, Arlen Realty. Consequently, much time was saved. The block housing Schrafft's and the Claridge Hotel from 43rd to 44th Street was expected to be home to still another tower.[59] Just south of Times Square, a 42 storey office building was under construction at 1411 Broadway, on the site of the former Metropolitan Opera House.[60] Just to the north of the square, a 42 story office building was well advanced at Broadway and 52nd Street, and a 41 story building had recently been opened at 1700 Broadway at 54th Street.[61]

In the case of the Bernstein Building at 42nd Street and 6th Avenue facing Bryant Park -- and within the Theater District -- the CPC was considering granting a bonus for the inclusion of a ballet school. When the ballet school did not materialize, it was decided to give the bonus for a through block connection instead.[62]

An added complication led to an important zoning text change. The developer had acquired fee ownership of the adjacent Wurlitzer Building, but as there was a lease that had not expired, and the tenant was not willing to relinquish it, the developer was not

able to go ahead with the building unless a text change was effected, allowing him to borrow FAR from the building that he owned, but from which he could not evict one of the tenants. A bond was given insuring that the building would be torn down. Two of the top floors of the new building were to be kept empty until the time the building would be torn down. (Millard Humstone, formerly of the Department of City Planning, said that in 1961, there was no thought that every parcel could be developed to its full potential. This concept has been changing as is expressed in the increased transactions involving transfer of airrights.)

Shortly thereafter,[63] on 22 Jan. 1970, the Theater District text was amended to meet a new situation. Height and setback modifications applied only to lots 40,000 sq. ft. and over. The Shuberts wished to develop an office-theater structure on a lot of 38,000 sq. ft. The text was altered to allow modifications of the height and setback regulations on lots less than 40,000 sq. ft. if "distribution of the bulk of the total development permits adequate access of light and air to surrounding streets and properties" and if such modification "is necessary to achieve good design objectives."

This modification of the zoning resolution was a prerequisite for the Shuberts to advance plans for a combined office building on Broadway between 52nd and 53rd Street. The 1,800 seat underground theater in the 43 story building was to be, according to the

Commission,[64] "the showcase of the Shubert organization in New York City." A midblock through block walkway from 52nd to 53rd Street was also to be provided. At the same time, steps were taken toward creation of a walkway, a continuation of the privately owned Shubert Alley between 44th and 45th Streets, abutting the Shubert and Booth theaters, that it was hoped would eventually link the new Shubert theater with the one at 44th Street.

"It may be straight, it may be crooked, it may bend around buildings along the way but it's a real possibility," a Commission spokesman said. At the walkway's future northern terminal, there was to be a glass topped atrium leading to the office entrances, "a space that's alive during the day and not just alive with the theater," said Bernard Spitzer, the building sponsor and developer. The FAR was set at 21.6, the maximum achievable under the Theater District legislation.

The creation of the walkway was to be a key objective in a proposed design overlay district. As rebuilding was proposed along the line between the pair of one-block walks, the Commission would bargain for the creation of a continuous pedestrian walkway.

Apparently a prime motivation for the later discarded overlay concept was that substantial FAR grants would be continued to be needed for further theater inclusions. To get at the same time special desired design features, FAR increases over and above the 21.6 ceiling would be necessary.

Midtown urban design staff tended to view the Theater District legislation primarily as a use district, in spite of the Uris pedestrian concourse precedent. In this manner, the design district was viewed as an overlay over a use district. Had there been a continuing unabated demand for theaters at the same time as a need for costly design features, the urban design staff might have continued to uphold the dual district concept. However, with the decline in demand for further theaters, the bonus envelope could be allocated to design improvements. In late summer midtown urban design staff were still anticipating further theaters. Consequently, it was contemplated that a number of requirements would probably have to be mandatory. "As with the theater bonus, the FAR is already 21.6, and we are running out of bonuses."[65]

In January 1971, Mayor Lindsay announced[66] that his Office of Midtown Manhattan Planning and Development would join with a committee representing the Broadway Association and twenty other Times Square organizations to formulate guidelines for future development of the Broadway - 42nd Street area. The committee had urged the Mayor to extend the Special Theater District zoning amendment of 1967 to cover redevelopment of the whole Times Square District.

In summation, instead of merely being concerned with the uses of the theater district as they then existed, the amended Special District would address itself to design problems of the

area.

The office felt that the 1961 ordinance was not adequate to handle the specific nature of the problems in Midtown Manhattan. Uses were seldom uniform in areas. There might be 10 or 12 different areas, each with specific and characteristic traits, but as regards to mapping, bulk, FAR, and use, they were all the same.

Therefore, in addition to the Times Square Special District, several other special design districts were to be simultaneously presented to the CPC. Together they would represent a virtual rezoning of mid-Manhattan.[67]

The first of the new theaters to open -- towards the end of 1971 -- was the American Place Theater in the Fisher Brothers' building, which was the third of the projects to be started under the Theater District legislation. Early in January 1972, One Astor Plaza was 80% rented up, but a month later, whole floors were still available at rentals of $6 per sq. ft.[68]

One important tenant was a major advertising agency. A spokesman for the city's Department of Commerce and Industry noted: "Companies going into that building are making a major commitment to the rejuvenation of the neighborhood. It's the first chapter in a promising West Side Story."[69]

W. J. Grant Co., the retail chain, agreed to take space in One Astor Plaza only after that building's owner took over Grant's leasehold on 200,000 sq. ft. in a building more than 30 years old.[70]

"We wouldn't have made a move anywhere without resolving the problem first," says Harry E. Pierson, Grant's vice president for store expansion.

What were the prospects for the theaters themselves?

In 1969/70, Broadway theater had one of its worst seasons ever financially and many contended, artistically too. Only 69 new shows opened in that season. The 1970/71 season saw the opening of only 46 new shows. In September 1971, the dearth of new productions left several theaters unbooked. Prospects were bleak for Off-Broadway as well.[71]

In 1970, while Broadway theaters were going empty, producers were lined up two and three deep, waiting for space in Off Broadway houses. One good reason: the average capitalization for a Broadway show in the 1968/69 season was $230,000 and for Off Broadway, it was $30,000. Seymour Vall, a theatrical producer, believed that the rising costs would force Off Broadway producers to look for large theaters -- from 300 to 500 seats -- and Broadway producers to look for smaller ones.

Vall was constructing a complex of five theaters on 13th Street. Several new theaters have been recently installed in hotels and several others are planned. One new theater -- the Roundabout Theater -- was installed in the basement of a supermarket serving a cooperative housing complex in Manhattan's West 20's.[72]

"Let's stop beating around the bush," said one theater operator, whose midtown theater fell outside the magic rectangle of the Theater District. "This is nothing more than subsidy, a very substantial government subsidy to theaters."[73]

Personally, he favored setting aside for theaters a fixed portion of the revenues the city collects from hotels and restaurants. The theater, he urged, cannot look for relief to the craft unions, which have to contend with erratic employment patterns, or to the theater owners, whose houses might be dark six months of the year.

In the third week of January 1970, only 15 theaters were in operation with officially opened shows, and of those, 8 were taking in over the box office only ½ or less of their potential gross receipts.[74] Percival Goodman, a planner, in taking the hard line, said[75] that the theater as an art form was moribund, doomed by the onslaught of films and television and that no new life would be injected via massive doses of bricks and mortar. The theater should be subject to the usual laws of the market place.

In January 22, 1971, the Mayor made the following remarks[76] at a meeting with the Broadway committee:

> Broadening the zoning amendment to create a special Times Square District would move us closer to our goal of revitalizing this symbolic heart of our city and restoring it as a safe, pleasant and exciting place to work in or visit. We anticipate intense redevelopment similar to that along the Avenue of the Americas. The task is to integrate New York City's entertainment center and midtown's office core, so we can protect the whole of west midtown from becoming a sterile forest of office towers devoid of retail shops and nighttime activity.

The pressure on the theater district had been largely induced by the city itself, through its zoning policies and the willingness to relax previously enunciated zoning principles. Ostensibly aimed at preserving the theater district, the remedy proposed to accomplish this objective tended in itself to increase the pressures on the theater district, because of the unprecedentedly high achievable intensity-of-use differentials that it fostered.

Developers had put together assemblages straddling zoning district boundaries. The portion of the parcel in the lower density district could be acquired at prices reflecting the lower intensity-of-use allowed.

The Theater District legislation provided an expedient way to rationalize an affirmative response to a request by the Uris interests, major financial backers of the incoming mayor, for remapping to allow for a particularly large intensity-of-use differential to be achieved, a request the fulfillment of which would otherwise have drawn accusations of illegal spot zoning. The initial Minskoff request was in a slightly different category. In that the site was directly at Times Square, and represented an indentation into the lower density buffer zone, rather than a complete severing, as in the case of the Uris request, the remapping request, although initially denied, was more easily justifiable.

The Theater District legislation, together with prior remappings, contributed to the creation of appropriate pre-conditions for "take-off" at Times Square.

In a tightly defined area, characterized by low existing densities and excellent rapid transit accessibility, it allowed densities substantially higher than those achievable in other sections of the Central Business District. Moreover, FAR points attributable to theaters were not counted, as they would have been elsewhere in the city, against allowed FAR, but, on the contrary, were awarded density bonuses.

In addition, relaxations of tower coverage provisions in all three of the district buildings reduced the necessity for assemblage of large sites or alternately enabled the provision of particularly large standard floors on large sites, which in turn, reduced building height, the ratio of outside building surface, to enclosed volume and concomitantly, construction costs and time. This unprecedented targeting of extraordinary measures contributed to creating appropriate preconditions for precipitate redevelopment by dramatically increasing the already high achievable intensity-of-use differential.

The strategy, then, was quite consciously not directed at preservation of the existing inventory of theaters. Rather, it was a strategy that sought to ride on the coattails of conventional enlightenment which either already believed, or

alternately could be influenced to believe that preservation of the concentrated cluster of theaters was essential. The commonly held belief in turn made it possible to justify the extraordinary steps taken.

The concentration of measures played a considerable role in drawing development to Broadway and to west of Seventh Avenue.

The District legislation had another interesting "take-off" effect. Under the rules of the district, it continued to be possible to build under the rules of the underlying district. The Arlen interests did precisely this. In forfeiting the achievable bonus density, they avoided extended design negotiations with the city and were, as a result, able to save much time in the construction of an office building directly opposite 1 Astor Plaza. Although construction was commenced much later than the district-initiating building, the Arlen building was ready for occupancy much earlier and could, in consequence, draw upon potential tenants for 1 Astor Plaza.

Characteristic of the initial redevelopment process was not so much concurrent redevelopment of contiguous areas, but rather development at dispersed locations within the district.

In that buildings could be designed in an interactive design process with the participation of the Urban Design Group and in that the district legislation encouraged projects with a mix of

uses: theaters, cinemas, shops, restaurants and offices, the precondition was created for projects with largely self-contained environments that could make a contribution to the enhancement of the quality of the spatial environment of their surroundings without concomitant contiguous development, characteristic of the cataclysmic clearance procedures of urban renewal.

The show-case building of the district, 1 Astor Plaza, particularly reflects the taking advantage of these new possibilities.

The price paid, of course, was in terms of increased densities and tower coverage.

77

The latest proposal for the Times Square area envisages a building that departs substantially from the district formula. A 2,020 room hotel, to be built on the west blockfront of Broadway, between 45th and 46th Streets, i.e. on the block immediately to the north of 1 Astor Plaza, which will necessitate the demolition of three legitimate theaters, including the Helen Hayes on 46th Street. The Broadway blockfront now includes movie theaters and shops. The new structure would contain a legitimate theater and a motion-picture theater.

Initially a ladder-like structure of twin towers, connected by five-storey high bridges, the building, as currently conceived, is to be a single hollow tower of fifty storeys, with a large enclosed court which is to be the trademark of the court. An amendment to the Theater District legislation is to be sought to

allow the developer to receive bonus density for providing open space inside the building rather than on its outside. The property on which it will be built is owned by the Bankers Trust Company as a trustee for a pension fund and is under lease to Peter Sharp, the real estate owner and developer. The project is understood to be a joint venture between Peter Jay Sharp and the building's architect, John Portman of Atlanta.

This latest proposal is indicative of the changed contingencies in the management of the production and marketing of space. To what extent has the future been mortgaged? While the legislation could be amended, 1 Astor Plaza, with its increased tower coverage, was an irrevocable fact. Moreover, the concept of providing enclosed space in lieu of open space is contingent on close to 100 percent site coverage and building walls rising without setback from the lotlines. Granting of such an exception would constitute a further major erosion of the principle of light and air. The environmental effects on the office tower and hotel occupants alike would be egregious.

Chapter 10

The Lincoln Square Special District: Bonuses for Design

The Special Lincoln Square District was the second of the special districts in which the Urban Design Group was involved. This chapter traces the process by which it was arrived at and discusses the principal issues.

In 1955, Lincoln Square was primarily a residential area for families with low or moderate incomes. Some well-to-do residents lived along Central Park West. Following the recommendations of the Mayor's Committee on Slum Clearance in 1956, City officials initiated the Lincoln Square Urban Renewal Project, comprising the Lincoln Center for the Performing Arts and new apartments in Lincoln Towers. For several years, it was N.Y.C.'s largest city-building undertaking.

Private investors responded enthusiastically to the public initiative. By 1970, over 2,200 additional new apartments had been built around the urban renewal project.[1]

Assessed value of all property in the area had, by 1970, increased 72% since 1955. But on the negative side of the ledger, thousands of residents with low or moderate incomes had been forced out by the ongoing change. Particularly hard

hit were the neighborhood's elderly, living in residential hotels and rooming houses.[2]

In this situation, typified by rapid, unguided, and sustained change brought about by external forces, the Lincoln Square Community Action Planning Program was initiated by the Lincoln Square Community Council, a neighborhood organization.[3]

In 1967, the Commission held public hearings on proposals to rezone areas on the east side of Broadway in the vicinity of Lincoln Center. They would have permitted central business district bulk and density in the area (FAR 15 + 3).[4] Apart from the inappropriateness of such bulk and density in the Lincoln Square Area, the Commission found that these proposals would not have brought about the optimal planning relationship of these properties to one another and the general area. According to a former employee of the Department of City Planning, D. H. Elliott had, shortly after becoming chairman of the CPC, suggested a new higher density residential district, "where R10 did not have sufficient FAR for economic site exploitation." In lieu of the introduction of a R11 or R12 district, an issue Elliott had difficulty of convincing the Commission to agree to, an extension of the bonus device was considered.

In 1967, the City rezoned a lot bounded by Central Park West, 61st Street, Broadway and Columbus Circle to the south

to allow a FAR of 18 (C6-6: 15 + 3) and eclusive commercial use. The developer of the 31,000 sq. ft. triangular site said:

> ...a lot of people were saying you couldn't build an office building there. Central Park West is solid apartments. The General Motors Building was going up a few blocks away, a potential glut on the market, and there were already a few office vacancies in the area. But we thought the future of the office market looked good and we decided to see what we could do. [5]

In return for the zoning change the city asked that the structure's open plaza be raised above street level and be used as a podium for the tower. They asked that trees be put in planters on the plaza and that the builders create a round well as a subway entrance.

"It took more time and cost more money to deal with the city," said Thomas E. Stanley, head of the Dallas architectural firm that designed the building, "but the net effect was beneficial. Their suggestions were good, and we got a better building." Occupying only one-third of its plot, with a large plaza, trees and reflecting pools, the structure would provide a nice transition from Central Park.[6]

The developer had argued that the triangular plot would be unprofitable to develop unless he got the zoning change:

> The history of triangular plots in N.Y.C. is filled with unprofitable triangular buildings. The shape is uneconomical and they are hard to rent. [7]

He decided to make the building rectangular with a small rectangular section jutting into one of the corners of the

triangular plot.

William Ballard, until 1967, CPC Chairman, had wanted to extend the open space system of Lincoln Center by connecting it to Central Park, one block to the east.[8] This would have entailed clearance of the block bounded by 63rd and 64th Streets, Broadway and Central Park West. The Ethical Culture Society located at Central Park West and 64th Street and the Westside Branch of the YMCA -- the MacBurney Branch -- opposed the plan as they would have had to vacate their properties. Another impediment was the intensive real estate activity in the area, largely induced by Lincoln Center. The remainder of the block facing on Broadway was acquired by the New York Academy of Arts and Sciences for $5.5 million. The Academy had planned to erect headquarters there. Later in August 1967 the site, which was being used as a parking lot, was sold to a group headed by Paul Milstein for $8.8 million. According to Paul Milstein, the Director of the Department of City Planning had encouraged him to acquire the property, and according to a former employee of the Department, Milstein had requested zoning changes on the grounds of hardship. Elliott, who had just become chairman of the CPC, suggested a new residential district because R10 did not have sufficient floor area ratio for economic site exploitation.

In the Spring of 1968, Lincoln Plaza Associates, headed by Paul Milstein, announced plans for a 40 storey apartment house on the 60,000 sq. ft. lot across from the Lincoln Center of Performing Arts. A cruciform tower was to be surrounded by a sunken plaza containing stores. In this manner Philip Birnbaum, the architect, was able to obtain additional valuable rentable area for his client that, because of a loophole in the zoning resolution, would not be counted against the allowed FAR.[9]

The proposed building violated a number of the Urban Design Group's emerging design principles:

- It did not adhere to the angle of Broadway. Its sunken plaza seriously interrupted retail continuity. This was a major criticism that had been leveled against the General Motors Building.
- Set well back from the avenue and the side streets, it did not define the street wall but rather aspired to the "tower in the park" concept. Indeed, the rendering that was concurrently released made it appear as if the building's site was integrally landscaped as an extension of Central Park.

The Urban Design Group entered into negotiations with Milstein and his architect. According to testimony given by Paul Milstein, he was told that unless he developed a building that the Department of City Planning desired, one which they

could design and dictate, and unless he followed the instructions of a consultant architect whom they would recommend, that department would see to it that there would be no building on the premises.[10]

On June 12, 1968, while the Milsteins and the Department of City Planning's Urban Design Group were holding meetings on the projected building across from Lincoln Center, the City Planning Commission and the Lincoln Square Community Council announced that they would jointly sponsor a 9 month study to produce a community development plan.[11]

The project, "the first of the kind," will seek to evaluate and coordinate burgeoning residential and commercial construction, and fit in planned improvements with those recently completed and others under way. Design problems and opportunities were to be reviewed. The study was to seek means to improve local shopping and to encourage "a lively diversity of commercial interests." The program had two basic steps:

- To find out all proposed or upcoming development in the area,
- To work out a coordinated action program.

Donald H. Elliott said the city and community "must capitalize on the energies generated by the huge public Lincoln Center investment to enrich the lives of all New Yorkers."

In noting that "approximately 25% of the nearly 50,000 residents are older citizens and half of these elderly residents are poor," Rabbi Edward E. Klein, president of the Lincoln Square Community Council, said: "We are determined that they will not become the forgotten victims of progress."

Hart, Krivatsy & Stubee, the planning consultant firm that had been retained to undertake the study, said the study was urgently needed to head off random displacement of elderly and poor residents, congestion of streets, and reduction of the number of shops and services.

On June 28, 1968, the CPC proposed a plan for a Special Zoning District for a 13 block area to the west and north of Lincoln Center.[12] Its boundaries were to be 67th Street to the north, 60th Street to the south. The proposal called for improved pedestrian circulation within the area and better pedestrian access to Lincoln Center. It would encourage the development of a midblock walkway lined with shops, moving picture theaters, restaurants and coffee houses. It was also hoped that a covered arcade along the east side of Broadway, from Columbus Circle to Lincoln Center, would materialize. "The $175 million Lincoln Center Complex," Elliott said, "has sparked a boom that properly guided can fulfill the rich promise of New York at its best." He said that one objective would be to have new structures build along the Broadway lot lines:

> This would preserve and accentuate the bold angle of the wide street as it cuts through the area and with the arcading, would make this part of Broadway a great urban boulevard.... We have a golden opportunity to create a spectacular urban showcase through coordinated planning. [13]

As incentives to carry out a coordinated district plan, the Planning Commission was to be empowered to increase the allowable size of buildings and also to waive height and setback regulations.

On June 27, 1968, in a letter to CPC Chairman Elliott, the Board of Directors of the Citizens Housing and Planning Council opposed the proposal because the Planning Commission had not established or discussed a plan for the area.[14] In the absence of a plan, the granting of floor area bonuses would be "an excessively discretionary matter," and in consequence "any prospective developer within the area might well be able to challenge your denial of a bonus to him as a capricious and arbitrary exercise of authority."

Hearings were held on July 17, 1968. The Real Estate Board of New York, in expressing general sympathy with the purpose to promote the character of the Lincoln Center Area, said the bonuses to be granted should be based on more objective criteria than proposed in the amendment because:[15]

- the board thought it unwise that so much discretionary power should be granted to any one agency;
- the grant of non-objective discretionary power invited

the use of improper influence and possible corruption;

- the absence of objective criteria would discourage new construction and new developments as an investor, in acquiring land or assembling, would not know what he could build and would be discouraged from going ahead with the venture;
- the very process of negotiation provoked by discretionary approach would be costly to the community and the investor in time and money.

Robert Alpern, the Planning Consultant to the Citizens Union, in expressing the belief that the concept of the Police Power had evolved sufficiently to allow mandatory review of all proposed buildings in designated areas of special design significance, voiced a preference for such a procedure with no provision for extraordinary bonuses. He was "concerned over the Commission's growing tendency to use increased bulk as a "carrot" (either overtly through Special District bonuses or covertly through ordinary mapping changes) in situations that could be and ought to be handled with the regulatory "stick" alone. "This troubles us particularly when the bonus to be granted can go the 44% basic FAR."[16]

Architect-planner Robert Weinberg took issue with the two key urban design objectives of the proposal, namely the creation of a mid-block walkway, open to the sky, lined with shops, cinemas, restaurants and coffee houses, and the placement of new buildings parallel to Broadway.[17] Such a walkway

seemed, in his opinion, not only unnecessary and uneconomical, but wholly undesirable because such a passage, bordered by the high walls of adjacent tall buildings, would, given New York's climate, its air pollution and the difficulty of keeping open streets clean, neither be attractive nor comfortable. Nothing was to be gained by deliberately "preserving and accentuating the bold angle" of Broadway, which he characterized "as simply a throw back to the horrors of Baron Haussman's Parisian Boulevard of more than a century ago, where all convenience and logic was sacrificed to artbitrary facade." "A succession of right-angled buildings, set back on each block or stepped back on parts of blocks, would achieve exactly the same effect of a great urban boulevard." while at the same time there is nothing to prevent the "creation of a sidewalk level arcade of one storey shops, restaurants or cafes following the actual angle of Broadway," above which he recommended permitting a bonus-rewarded plaza to start at the 2nd floor level.

Discussions on the building between the builder and the City Planning Department extended over 1 year. These discussions did not produce an agreement to a structure satisfactory to both sides. The Milsteins finally went ahead with plans for the construction of a building without further negotiation with City Planning. However, they adopted the last proposed design of the Urban Design Group and filed plans with the

Department of Buildings.

"We were practically a glorified drafting service for the Planning Commission," Birnbaum, the architect, was later to remark.[18]

Since the proposed structure did not comply with the existing zoning resolution in terms of sky exposure plane, setbacks and bulk, a variance was sought from the Board of Standards and Appeals by an application filed on October 8, 1968. The Board of Standards and Appeals, following a public hearing held on December 10, 1968, approved on January 14, 1969, the application for a variance.

The Milsteins had submitted an appraisal of the value of the property showing that roughly one year after the property had been acquired at a cost of $8.8 million, the value of the property had risen to $12 million. Mr. Norman Marcus, Counsel for the Dept. of City Planning, sought to persuade the Board's chairman, M. Glass, that no hardship existed:[19]

Mr. Marcus: The very statement in the applicant's document before you, that the appraised value of this property today is $12 million, contrasting to the price of $8.8 million, which was the cost, should be, I think, the most eloquent testimony of the value under the current conditions of the property, and the lack of hardship in this case.

Chairman Glass: How do you draw that conclusion? If the value of the land comes up, the hardship reduces?

Mr. Marcus: They submitted an appraised value from a reputable source, which indicates that under current conditions, the value of the property is $12 million. That is, roughly, one year after the property was acquired at a cost of $8.8 million.

Chairman Glass: Are you suggesting that as the value of the land goes up, unimproved, the economic return need be less?

Mr. Marus: I'm suggesting that this appraised value, the figure of $12 million, indicates a figure at which this property could be sold at the present time.

Chairman Glass: Does that mean therefore, there is no hardship in developing the property, within the limits of the zoning resolution?

Mr. Marcus: It would indicate that the appraisal is made on current conditions as it says, and that no one makes an appraisal on the conjectural elements of a variance.

Chairman Glass: That is what you think!

The Board, cognizant of the then pending Special Lincoln Square District, with its maximum floor area ratio of 14.4, found that a major contributing factor to the hardships was the design criteria imposed by City Planning and that the plans complied with the stated objectives of the Planning Department as to the height of the street wall on Broadway, the arcade along that frontage, and as to the position of the tower portion of the building. The Board granted a variance permitting a building with 1,052,266 sq. ft., which was equal to an FAR of 16.9, 2.5 greater than the proposed district maximum of 14.4, but almost 7 points higher than the existing district

base of FAR 10. According to a State law limiting the residential FAR to 12, the additional FAR had to be used for offices.

The Chairman of Community Planning Board Number 7 had testified on December 10, 1968 that the proposed change would:

- "permit excessive densities in land;
- negatively affect the residential character of the neighborhood,
- create a safety hazard to school children in adjacent schools,
- worsen traffic flow and public transportation,
- and was contrary to the interests of effective community planning."[20]

The President of the Lincoln Square Community Council testified that "...great bulk on Broadway would immeasurably complicate traffic, parking, transportation and pedestrian movement."[21]

The Planning Commission saw the variance as a threat to the Special District Plan, in which a developer would be allowed to build to a higher density only if he also agreed to construct certain amenities to give the district an uniform appearance. On the same day as the granting of the variance, on January 14 1969, the Corporation Counsel directed that the issuance of any permits for 1 Lincoln Plaza be withheld pend-

ing legal reviews of the variances; the Department of Building ordered the Milsteins to stop all work under a previously granted escavation permit. On January 20, 1969, foundation permits were denied.

On January 15, 1969, the CPC scheduled a public hearing for January 29 on the proposed Lincoln Square Special District. The matter was considered further on March 19, 1969.

In March 1969, the Department of City Planning initiated an unusual suit against another city agency, the Board of Standards and Appeals, in an attempt to invalidate the zoning variance. The increased use of specially zoned districts was advocated in the draft of the city's Master Plan to encourage improved design. Elliott viewed the Board's action as a threat to the entire policy.

Milton Glass however viewed the special district's concept as an attempt by the Planning Department:

> to dictate throughout the city what people shall build and how people shall build it. What they're really saying is: Come on down, Boys. If we don't like the color of your eyes or the way you part your hair, we won't let you build. 22

The heart of the Planning Department's legal argument rested on the definition of a variance. Both Chairman Glass and Counsel Marcus agreed that a variance might be granted only if existing zoning created a hardship for the property owner. Chairman Glass contended that there was a hardship, while Mr. Marcus said there was not. The Milsteins had begun

excavation but had sued the Buildings Department for refusing to grant them a foundation permit while the Planning Department's suit was pending. On March 11, State Supreme Court Justice Mitchell D. Schweitzer reversed the city ruling denying issuance of a foundation permit, leaving standing the variance that had been issued by the Board of Standards and Appeals. This cleared the way for construction of the 42 storey $30,000,000 structure, the first seven floors of which were to be for commercial use with the rest for luxury apartments.

On March 19, 1969, the CPC approved the Special Lincoln Square District. Donald H. Elliott said again that the variance that had recently been granted to the Milsteins was a threat to the plan.

As the variance could not be superceded by the amendment, there would be no advantage to the Milsteins to include amenities, encouraged under the new plan. The New York Times wrote in an editorial prior to CPC approval, "Professionalism vs. Blight," that the variance "virtually kills the excellent Lincoln Square scheme." It also gave:

> what can be construed as a "windfall" award to the builder by permitting a much larger structure with much greater density than would be allowed under existing zoning or even under the more generous bonus provisions of the special zoning. 23

The amendments creating the Lincoln Square Special District were intended to encourage sound growth, to provide supportive services for residents, visitors and workers, and enhance, protect and perpetuate the special character, interest and value of the Lincoln Square Community.

The provisions of the amendment were divided into envelope and use categories.[24]

Heading the list of envelope provisions were actions to be taken to emphasize and protect "historic" Broadway. Subsumed under the heading of The Broadway Street Wall, they included:

- a mandatory arcade to integrate Broadway with the architectural and cultural complex at Lincoln Center to shield pedestrians from the elements, to provide large walking areas, to be developed along the east side of the Broadway-Columbus Avenue axis, beginning on Columbus Avenue at 66th Street, continuing south on Broadway to 61st Street, where it was to turn east and terminate at Central Park West;
- a uniform street wall requirement, under which building walls on either side of Broadway, from 60th to 68th Street and on Columbus Avenue from 65th to 67th Street, were required to be located at the lot line and to rise uninterrupted for a height of 85 feet and then to set back 15 feet. On three sides of the two trapezoid shaped blocks near the Broadway-Columbus Avenue intersection, no set-back was required.

- Unless a commercial use, otherwise allowed in the district, was listed, a specially developed list of uses that provided for the "special needs, comfort, convenience, enjoyment, education and recreation of the many day and night visitors, who are attracted to the civic, cultural, entertainment and educational activities of the Special Lincoln Square District, "the amount of street it might occupy on Broadway or Columbus Avenue was limited to 40 feet."

Members of the Zoning Subcommittee of the Citizens Union were to question the absence of arcades on the west side of Broadway, the immediate approach to Lincoln Center.

According to Commissioner McQuade, the Commission had "the orderly grandeur of the Old Park Avenue in mind" when it proposed to establish a common cornice height. "If it works this part of Broadway may become one of the world's pleasantest and best looking avenues," said McQuade.[25] But Philip Birnbaum, the architect for 1 Lincoln Plaza, in calling attention to the recently completed Gulf and Western Building to the south of the district, said some buildings were going to be around for 30 years or more, making it difficult to realize a Rue de Rivoli concept with a continuous arcade and an uniform street wall height.[26]

> If we could persuade the landowners who wanted to build here to build on this pattern by granting them certain exceptions in zoning, there were other amenities we could urge on them too,

Commissioner McQuade related. Behind the bulk of their buildings, courtyards could be carved out in the inner blocks -- areas open to the public, with restaurants and small shops, sort of informal ante rooms to the Lincoln Center Plaza across Broadway.

In addition to the mandatory arcade four new amenities eligible for bonuses were introduced, each to be governed by a Special Permit issued by the City Planning Commission and the Board of Estimate:

- The Pedestrian Mall was a publicly accessible outdoor space.
- The Galleria, a covered walkway with a minimum width of 20 feet and height of 30 feet, was intended to function as a secondary pedestrian system and as a location for supportive uses.
- The Covered Plaza, a ground floor level room, with at least 1,500 sq. ft. and 45,000 cubic feet volume, was to function as "a congenial shelter and sitting space for visitors and residents of the district" and to contain benches, chairs, works of art, plantings, and adequate illumination. Part of its area might also contain cafes, bazaars, kiosks, bridges and other similar features, while the uses on the special list must be located along at least 50 percent of the walls of the room.
- Subsurface concourses or bridge connections to other buildings or subways to provide additional access to the subway

system.

By providing appropriate amenities the floor area on a zoning lot might be increased by 4.4 FAR points over the base level of FAR 10, but a bonus or combination of bonuses might not increase the FAR on a zoning lot above 12.0. In determining the increase in floor area that may be given for the inclusion of any amenity, the Commission was to consider:

- The amount of floor area by which the total floor area of the building would be reduced because of the inclusion of the amenity;
- the direct construction cost of the amenity;
- the amount of continuing maintenance required for the amenity;
- the degree to which the inclusion of amenity furthered the objectives of the Special Lincoln Square District.

The Commission was to restrict the increase in floor area for any amenity within the ranges set forth in the following table:[27]

	Increase in Sq. Ft. of Floor Area	
	Minimum	Maximum
(a) for a mandatory arcade (82-09)		7 per sq. ft. of Mandatory Arcade
(b) for any other arcade, except that no portion of a building can qualify both as an arcade and as a Mandatory arcade	5 per sq. ft. of arcade	5.5 per sq. ft. of arcade

(c) for a plaza, provided that no portion of a zoning lot can qualify both as a plaza and as a pedestrian way	6 per sq.ft. of plaza	7.2 per sq. ft. of plaza
(d) for a pedestrian way	6 per sq. ft. of pedestrian way	7.2 per sq. ft. of pedestrian way
(e) for a galleria	8 per sq. ft. of galleria	9.6 per sq. ft. of galleria
(f) for a covered plaza	12 per sq.ft. of covered plaza	14.4 per sq. ft. of covered plaza
(g) for subsurface concourse or bridge connections to other buildings or to subways		An amount, subject to the limitations set forth in Section 82-08, to be determined by the Commission, after consideration of the amenity by criteria (1) through (4) of this Section.

Height and setback requirement might be modified by Special Permit to accommodate zoning lots of any size which are affected by the Broadway street wall requirements or which contained any of the Public Amenities listed above.

Because the Special District was in an area in need of parking facilities carefully located with respect to impact on traffic flow, residential activity and safety for children and pedestrians, parking and loading facilities were to be governed by Special Permit issued by the CPC.

Because the Lot Area requirements operate to reduce the number of residential dwelling units which can be built in a mixed building (a building containing residential and commercial uses or residential and community facility uses) to below the number permitted in an entirely residential building, the CPC may, by Special Permit, reduce or waive the Lot Area requirement for the non-residential portion of mixed buildings, where it was demonstrable that additional density would not adversely affect the building or the District.

The Zoning Advisory Council, an organization whose objective it was "to stimulate an interest in zoning, building laws and related matter in the City of New York, so as to promote public health, safety and the general welfare," opposed variable discretionary zoning controls for each individual parcel of land in the same mapped zoning district, because:

- such "contract zoning tended to negate the well established zoning principle of uniformity for each class of buildings throughout each district" and may constitute illegal spot zoning;
- such "technique and vagaries would act as a deterrent for new ventures, as a developer or planner would be unable to

predetermine a reasonably accurate building projection for a considered site."[28]

The Architects' Council of New York City found it

> astonishing that a city administration, dedicated to advancing creativity, would promulgate such a proposal to virtually freeze and dictate building design to a preconceived model in such an extensive and important area.[29]

Robert Alpern, testifying on behalf of the Citizens Union, endorsing the proposal in principle, made a number of recommendations:[30]

- There should be many Special Area Districts with preferred use and public amenity lists, the latter baited with special incentives, granted by Special Permit, supplementing or superseding the existing "as-of-right" bonuses for plazas and arcades; with power to force private builders to construct to specifications in certain critical locations.
- Because the establishment of Special Districts requiring "myriad" Special Permits, to a considerable extent requiring separate hearings and approvals by both the CPC and the Board of Estimate, which imposed a considerable burden on builders, developers and the Department of City Planning, Alpern suggested that the Commission investigate the legal possibility of planning permission without Board of Estimate review. "Precedent existed in the large scale development sections of the New York Zoning Ordinance and in the traditional Planning Commission Jurisdiction

throughout the country, respecting subdivision design."

- Because the designation and administration of Special Districts required expert attention to a multitude of details, the establishment of Special Districts placed increasing strain on an already overworked staff. Consequently, the Commission should carefully evaluate its administrative capacity to assure the City that the Districts get the consideration they require and possibly revive proposals for a special zoning administrator.

The Zoning Subcommittee of the Citizens Union questioned whether the District was perhaps too large as a Special Use District, and too small as a Special Design District, considering the need for design controls around Columbus Circle and up Broadway to 73rd Street.

Commissioner Beverly Moss Spatt, in her dissenting report and in a letter to the New York Times, argued against the Special District:[31]

- In approving the special district around Lincoln Center, the CPC had made unsupported prejudgement that the area should be developed at higher densities than allowed at the time.
- The city should not endorse an amendment which would squander huge floor area and density bonuses without reference to any plan for the area's land use and circulation system and its relationship to the greater central business district to the south.

- "the Lincoln Square district had a serious linear circulation problem. Block-by-block design is meaningless. The arcades and pedestrian malls may open up some area for pedestrian circulation, but this is peripheral to the really serious vehicular problem which this amendment only exacerbates."
- The objective of controlling urban design in key areas, desirable though it be, should not be at the cost of sacrificing planning controls. Individual building plans should be reviewed in reference to a concept plan that should be a matter of a public hearing and public adoption.

Edward E. Klein, President of the Lincoln Square Community Council, in expressing the Council's strong support for the special zoning, took issue with Spatt and called attention to Lincoln Square's locational attributes and capacity for additional population, its community facilities, subway and bus service, proximity to Central Park, Riverside Park and to the vacant river frontage which has long range potential for open space reclamation. There were still, in March 1969, several thousand fewer residents than before the urban renewal project.[32]

In noting that the great amount of recent and scheduled development had been stimulated by the urban renewal project begun in 1957, Klein characterized the special zoning as a laudable attempt to influence this development toward "some clear, metropolitan and community planning objectives,"

objectives which were being spelled out by "a current and constructive planning program with private consultants, co-sponsored by the City Planning Department and our Council." The special zoning would provide the means for numerous functional amenities and public improvements would encourage new development to provide specific neighborhood-oriented shops and services that would probably otherwise be omitted, and by controlling locations of garages, entrances and exits, and improve vehicular circulation.

Two months earlier, in January of 1969, Paul Davidoff and Neil Gold of Suburban Action had presented a memorandum on Special District Zoning in Manhattan to the Department of City Planning.[33] Their memorandum was submitted at the request of the Office of Manhattan Development, then headed by Mr. Richard Weinstein, who had asked for the two planners' views respecting the proposed Special Lincoln Center District. In it they dealt with the question of how the city's zoning laws might be used to develop low and moderate income housing at no capital cost to the city or the Federal Government. Specifically, they suggested that if it was proper to demand that developers in the Lincoln Center District included arcades, plazas and gallerias in return for an increase in floor area, then it was also proper to demand that these same developers lease a portion of their units to the City Housing Authority in return for a similar increase in floor area. These units,

they pointed out, could be provided either in the development or elsewhere in the Special District.

At a meeting of the Board of Estimate held on April 24, 1969, Chairman Elliott denounced as "bold faced lies" charges by the former Buildings Commissioner Charles G. Moerdler that the Lincoln Square District plan was "rotten to the core". Moerdler, in private law practice with Stroock, Stroock and Lavan, had filed a $2.3 million claim against the city for what he contended were unreasonable delays in approving plans by his clients for their $30,000,000 office and residential building.[34]

At the hearing, Manhattan Borough President Percy Sutton had charged that the proposal for the area was planning only "for the rich." After almost an hour and a half of bargaining between Chairman Elliott and Mr. Sutton in conference, Mr. Elliott agreed to seek to triple the zoning district's size and award a bonus for builders who put low and middle-income housing within the district. Mr. Sutton had insisted on an amendment that would allow a builder to negotiate for 500 sq. ft of commercial space in exchange for every low or middle income apartment in the building. Elliott said the district would have to be enlarged to accommodate the lower income housing.[35] Based on the agreement, the Board of Estimate gave the Special District its unanimous approval.

In another last minute action, in response to an appeal by former City Planning Commissioner Abraham M. Lindenbaum, the district's boundaries were amended to exclude property between 66th and 67th Streets, Columbus Avenue and Central Park West, where the American Broadcasting Company planned a $50 million radio and television entertainment and arts complex. ABC had, over a period of years, acquired the property at a cost of "many millions of dollars" and had retained an architect to design its new corporate headquarters which it intended to build at an unspecified future point in time. A rendering of the building had been exhibited in 500 theaters throughout the country and on TV as the future home of ABC. The district's Broadway Street Wall requirement would have ruled out the envisaged design concept.[36]

In taking issue with the editorial standpoint expressed earlier in the New York Times, Paul Milstein, one of the developers of 1 Lincoln Plaza, had the following to say:[37]

> Your editorial says that the City Planning Commission has entered into a period of sophistication and expertise of a kind essential to the complexities of today's planning problems. If this is so, it is coming late in the day. Since 1965, there has been a near cessation of private residential building in the city, largely attributable to the failure of the City Planning Commission to adjust the zoning ordinance to the economic realities of current costs.

Implicit in the statement is the view held by wide segments of the investment building community that the zoning ordinance should serve to ensure them, in the face of rising costs, a constant, high return on equity. Major investment builders, who had staunchly backed Felt's 1960 comprehensive zoning resolution, because of its favorable affects on real estate, now blamed the Planning Commission for not seeing to it that high returns on equity were maintained. Indeed, the ability for developers to achieve high returns on their equity had been a guiding criterion of Felt.

The Milsteins had been able to achieve such an unprecedented density in large measure, because they and their architect had understood how to exploit the inexperience of the Urban Design Group, who were still relatively new to their jobs.

The building was to be only the second mixed-use building to be built under the 1960 code. In both cases, the architect was Philip Birnbaum, a noted Manhattan apartment architect. The 1960 code militated against mixed office-residential buildings because of greater open space requirements, than in single-use office or residential buildings. With the need to accommodate two separate vertical circulation systems, one for the office portion, the lower portion, and one for the residential portion, large lower floors were needed. In the case of mixed

buildings, however, the plaza bonuses could only be fully availed of if a particularly large plaza was provided. This circumstance, in conjunction with the need for large office floors to accommodate two separate service cores, made it necessary to have extremely large sites for mixed office - residential buildings. Moreover, residential buildings commanded significantly lower rents than office space, particularly in the aftermath of the grace period.

With the propagating of the "rue corridor" by the Urban Design Group, a significant opportunity began to emerge, for a mixed-use building to be erected. Substantial advantages to the developer were to accrue from the "rue corridor" concept. However, as the site of the intersection of slanting Broadway and Columbus Avenue, did not face onto a parallel opposing building line, a prerequisite for a "rue corridor", but axially onto the Beaux-Arts style open-space system of Lincoln Center, it was more expedient to stress the necessity of preserving the "bold angle of Broadway" as the key objective of the design overlay district.

Preservation of Broadway's"bold angle" of course necessitated adherence to the avenue lot lines, which was mandated. This, of course, ruled out the plaza bonus and substitution by an increased arcade bonus, which, as mentioned, was, in the case of mixed-use buildings, particularly onerous to developers. These twin actions made it possible to achieve large office floors,

which could easily accommodate separate cores.

With the Urban Design Group insisting on a 85 foot cornice line, the next difficulty to resolve was how should the two key uses be best accommodated in the building. It would seem logical to have the residential use start at the 85 foot setback. In that case, however, the residential portion of the building would have been too small to be economical given a total FAR of 14.4. On the other hand, having the use-break in the podium would have created significant floor plan difficulties, if apartments had to be fitted above an office floor plan. Moreover, apartments would have been directly at the avenue lot line. Clearly, it was in the interest of the developer to have the podium portion of the building devoted solely to the offices.

The Board of Standards and Appeals variance made it possible to fill the podium with offices, while,at the same time, allowing the developer to include a large number of apartments in the project.

Considerations of residential amenity leads to the questioning of the validity of the "bold angle" and "rue corridor" concepts. In the case of the recently announced second building in the district, the podium will be occupied by a church.

This chapter has sought to shed light on the critical forces in the interactive process leading to the creation

of the Lincoln Square Special District.

Chapter 11

The Proposed Special Transportation District Legislation: Exploiting a Priority Issue to Enhance the City's Leverage

This chapter first gives an overview of the development strategy pursued in the transformation of Lower Park Avenue and Grand Central Station. A proposal of the City to establish a Special Transportation District around Grand Central is then reviewed in the light of this redevelopment strategy.

In 1903, the New York architectural firm of Fellheimer and Wagner started to design the Grand Central Terminal. The New York Central System and the New Haven Railroad, the clients, were skeptical about some of the proposals the architects made at the time:

- When the station was planned, the area was far north of intensive development. No cross streets existed between Madison Avenue and Lexington Avenue. Traffic was mainly horsedrawn and light. In anticipation of northward expansion of the city, the architects proposed extending all east west streets across what was, at the time, an open cut railroad yard, as well as continuation of Park Avenue. East-west and north-south streets were to be grade separated, with ramp connections. The only element of this plan to be retained was the Park Avenue overpass at 42nd Street.

- In anticipation of a growing number of commuters, the architects proposed separate commuter facilities and exits along 46th Street so that commuter traffic would not interfere with long-distance passengers. Express train traffic was to be oriented towards 42nd Street. The railroads, however, resisted the idea.
- The architects proposed using the air space over the open yards for high grade buildings. This was utterly innovative and the railroads were reluctant but permitted construction of one building. The first techniques of vibration control were developed. Thus the groundwork for subsequent "air-rights" development of the Lower Park Avenue - Murray Hill district was laid. By that time, however, the opportunity to incorporate the initially proposed traffic innovations had been precluded.
- According to Alfred Fellheimer, one of the partners of the competition-winning firm, their proposal to build a tall office building over the station won the competition for them. It was intended that it should offset too great carrying charges, but the railroads believed that offices so far uptown would never rent. Nevertheless, they reluctantly let foundations and columns over part of the property be dimensioned to support a 22 storey building.

Since 1945, Penn Central and its predecessor the New York Central System, had converted most of its residential properties flanking lower Park Avenue in the vicinity of the Grand Central Terminal into profitable office buildings. After 1945, with New York City clinging onto rent control, the commodious residential buildings facing the avenue gradually but inexorably made way for more profitable corporate space. Thus in maximizing its income from real estate, which it claimed was necessary to offset losses in other areas, the railroad displaced the entire residential component of its famous Park Avenue Gold Coast. Even the land-mark terminal itself was endangered.

In September 1954, the railroad announced a plan for a 5 million sq. ft. development that was to be taller than the Empire State building, which Webb and Knapp, a New York Developer, proposed putting up over the terminal. The architect was I. M. Pei.[2]

Two weeks later, Patrick B. McGinnis, president of the New Haven Railroad, which shared the terminal and paid over 30% of its operating costs, came out in support of an alternate plan prepared by Fellheimer and Wagner, New York architects, and the firm that, starting in 1903, had designed the original terminal.[3] One of the firm's original partners, Alfred Fellheimer, wrote in 1954: "In spite of my own pride in the

station, I must say it has become an obstacle to attainment of important public objectives." Many of the ideas initially formulated in 1903 were resurrected. His firm's proposals included:

- new street extensions at different levels to minimize street crossings;
- creation of a one-way street pattern;
- facilities for rerouting buses and trucks;
- relocation of the major part of station-induced taxicab traffic away from 42nd Street and Vanderbilt Avenue;
- a major parking garage with multiple ramp access from several streets;
- direct northward outlets for commuters to avoid back-tracking toward 42nd Street, and
- to keep the building's occupants off the congested streets, a roof-plaza, restaurants and a shopping center at the first setback level.[4]

In its November 1954 issue, Architectural Forum published an open letter to New York Central System's Chairman Robert B. Young, the New Haven Railroad's President Patrick B. McGinnis and their associates. It was a plea to save the Grand Concourse, threatened by the redevelopment plan. It was signed by 235 architects. The Grand Concourse was described in the following terms:

> This great room is noble in its proportions, alive in the way the various levels and passages work in and out of it, sturdy and reassuring in its construction, splendid in its materials...
> The big sunray pattern filtering through its windows is part of its drama, but so is the adventure of scurrying through labyrinthine passages to emerge on a rainy day eight blocks north, or engulfing a hearty steaming oyster stew in the cavelike Oyster Bar...
> To throw away a known masterpiece of architecture, tested and loved; to remove an important link between the city and its history; to grow careless with the evidence of past greatness, would be an adventure attended with great risk...
> We address to you the plea: Save the Grand Central Concourse.

But several architects dissented and did not join in the plea to save it. Marcel Breuer, for instance, wrote:

> We should not put obstacles in the way of a new project that may create a still better architecture... I believe in the vitality of our time. Good contemporary architecture stands up against the great creations of any past. Any "cultural" or "local patriotic" hampering of free development of contemporary architecture is dangerous. 5

And John S. Bolles of San Francisco, California, asked:

> Did you ever try to find Track 39? ...the men's room... the taxi stand? Did you ever try to get in or out of the place? Or drive around on Park Avenue? Honestly, the only good thing about the place is the oyster stew, and that is only seasonal! 6

Minoru Yamasaki of Detroit, Michigan, wrote:

> Though it is a marvelously beautiful room, Grand Central is in an archaic style, does not particularly express the exicting materials or exciting methods of construction we have today. The new complex should culminate in the most exciting room in the world, perhaps with its roof an elegant perforated shell, such as Nervi has done in Italy. A tremendous center emptying into and fed by underground railroads emptying into a wonderful complex of office buildings reachable in a five minute indoor

> walk and yet accessible to all New York could be the most exciting job in the world, in the right hands. [7]

Also in the fall of 1954, Emery Roth and Sons, the architects, as part of a study of what could be done with the New York Central Systems properties, developed a scheme for a 65 storey tower astride a 10 storey base above the Terminal. With its longitudinal axis spanning in a northerly southerly direction, the tower would not have encroached on the terminal's famous Grand Concourse. Moreover, lined up with the New York General Buioding, an earlier airrights structure, it would have permitted axial views up and down Park Avenue past it. It was not until the following spring that the scheme was released.[8]

Robert C. Weinberg, a planner-architect, in noting that the proposed new building would encroach on light and air of existing buildings, proposed that the city:

> Condemn or otherwise acquire the airrights above the roof level of the present station and then recoup the entire cost of this over a stated period of years, by increasing the assessed valuation of all the properties in the area.

Such increased assessed valuation could be justified, he said, on the same theory that was used in recouping the cost of demolishing the old elevated railroad lines, in which case adjacent property had increased in value through the new light and air let into the street.[9]

Subsequently, at the suggestion of Richard Roth, Walter

Gropius and Pietro Belluschi were retained as planning and design consultants. In May 1958, the largest commercial building in the world was announced.[10] The building was to have a total net rentable area of about 2.5 million sq. ft. and an overall area of about 3 million sq. ft. It was to house three legitimate theaters, restaurants and a 2,000 car parking garage covering four levels. Construction was expected to start by 1960 and completion was scheduled for late 1961. At the suggestion of Gropius and Belluschi, the longitudinal axis of the tower was turned 90°. In consequence, views past the tower were blocked off. The 49 storey broad octagon tower resting on a 10 storey base provided a backdrop for the New York Central's tower. Vincent Scully, the architectural historian, was of the opinion that the "fat, wide slab of the Pan American building dealt Park Avenue" its fatal blow because "it visually denies the continuity of the Avenue beyond Grand Central, deprecates the length of the Avenue's axis of movement, and smothers its scale."[11] Gropius and Belluschi would have preferred to have a park replace the tower.

The concourse was excluded from the 3½ acre parcel that the railroad turned over to E.S. Wolfson, the developer. Nevertheless, James O. Boisi, N. Y. Central's vice president in charge of real estate, said the concourse was a burden and that he did not consider it inviolate. He said he had excluded it because he thought that previous schemes, such as I. M. Pei's

1954 scheme for Zeckendorf of Webb and Knapp involving 10,000,000 sq. ft. and 50,000 people, were too big. "I serve no purpose making grandiose plans," he said.[12] Instead limited development schemes were encouraged which would quickly start to generate a cash flow to the railroad. A strategy was pursued in which the rate of replacement was regulated to avoid glutting the market.

Douglas Haskell laments the missed opportunity to comprehensively redevelop the area, given the rare occurrence of adequate land already assembled, and given the Railroad's perceived need to replace rent controlled apartment buildings with more profitable structures:[13]

> ...instead the Central hired a real estate butcher to cut up its magnificent Grand Central City like a carcass. Piece by piece, individual lots were leased or sold for individual office buildings...in the end the choice piece of all which should have given the correlated "New City" its urban style and its crown, was let out to Erwin S. Wolfson, to see what he could do with it as a speculative builder.
> Wolfson, having obtained his land at an inflated rate and being unable to treat the entire empire as a whole and thus to average out his costs, proceeded to get a massive rental value out of his one building by setting rental rates low enough to attrack large numbers... This meant putting a huge low cost building there...

This, Haskell contrasts with a vision of the:

> whole of Grand Central city linked together along Park Avenue above street levels and with new elevated bridges across cross streets. So as to become, in effect, an eight or ten block skyscraper laid on its side, with the cross streets passing through it or rather under it and with microtransport available in a jiffy like a sort of horizontal elevator system - to pull dozens of hotels, office buildings, clubs, theaters, and who knows what

> else into one swiftly conveniently navigable micro-city - a grand Grand Central... Moreover, so major a development could demand of government - city, state or federal - a series of public improvements to go with it.

Grand Central could have been such a "flexible, well distributed, modestly high horizontal skyscraper had its owner not leased out their ground piece-meal."[14]

Charles Abrams took a different view:

> I have heard a great deal of opposition to the Pan American Building over Grand Central Terminal, some planners have said that it is too high and should be spread out. The fact, however, is that height in office buildings around Grand Central concentrates people within walking distance from station to work-place whereas horizontal spread of office buildings increases the number of cars and taxis which must carry the people to buildings and mass transport.

Another defender of the project contended the business community worked best "in a vertical city...a three dimensional city...Congregation is, after all, the principal function of the city."[15]

Boisi, of the railroad, believed that many of the tenants would be drawn from office buildings within 15 blocks of Pan-Am as firms sought more space.[16] As many arrived at Grand Central, they would in future simply take the elevator up to their office. Congestion on sidewalks and buses would thus be reduced as would be the demand for taxis. He believed that the building's population would be closer to 10,000 rather than 17,000, the figure usually cited, because

- tenants would allot their top staff above average amounts of space,
- computers tended to perform many tasks formerly undertaken by lower-paid staff, thus further reducing office density,
- much labor intensive back-up work would be performed elsewhere in the suburbs where rents were cheaper.

The incorporation of a number of circulation improvements was planned:

- a pedestrian concourse was to connect the main concourse directly to the ground floor level of the Pan-Am Building;
- new exits were to be provided at 45th Street to the north and 44th Street to the west;
- a large bank of escalators (6 pairs) was to connect the Pan-Am lobby with the main concourse.

Pietro Belluschi commented:

> There is one point that you cannot gloss over, and that is the congestion in the subways. Of course ...when a baby grows out of his shoes, you don't cut his feet down, or cut off his toes, you just buy new shoes; and we are used to growth in this country. 17

Richard Roth, Sr., felt that eventually all surface transportation with the exception of diplomats' cars, buses, taxis and automobiles driven by the handicapped, must be banned from the Grand Central area and people will "walk as they do in the Wall Street district." He predicted that "Pan-Am will have the most serious impact on its surroundings

at lunchtime because the building lacks adequate restaurant facilities and so does the area.[18]

But in August 1968, Real Estate Forum wrote:

> But it is generally conceded now that far from complicating the pedestrian movement situation, the spacious lobby facilities of the Pan-Am and the large bank of escalators connecting its lobby with the main concourse of the terminal has become an important and popular exit point for an estimated 50,000 people per day pouring out of Grand Central every morning as well as an entrance from the north in the evening. Thus taking large numbers of pedestrians off the street areas around the terminal, easing much sidewalk congestion on Vanderbilt, Lexington Avenues and 45th Street.

On August 2, 1967, the City's Landmarks Preservation Commission designated the terminal a landmark, the property at Park Avenue and 42nd Street was also pronounced a landmark site.

In January 1968, Union General Properties Limited, a British based property development and investment company, obtained an option to lease the air rights over Grand Central Station for a term of 50 years, with a 25 year renewal option, from the 51st Street Realty Corporation, a subsidiary of Penn Central Railroad. On June 18, 1968, the English developer Morris Saady, head of Union General Properties Limited, presented to members of the staff of the Department of City Planning his plans to "float" a 55 storey $100 million dollar building above Grand Central.[19] The proposed second Grand Central Tower, although it would be four storeys shorter than the Pan-Am Building,

was to rise about 150 feet higher because the new structure was to have its "ground" floor 188 feet above street level - just above the roof of the railroad terminal's waiting room. The Grand Concourse was to remain untouched. Marcel Breuer's answer to the difficult design problem of putting a skyscraper behind a facade designed in 1912 was to visually separate the two elements. The landmark facade was made up of a series of triumphal arches filled with narrow steel framed windows, a set of massive fluted Greek columns and a 48 foot high group of statuary representing Mercury, Hercules and Minerva and a clock 13 feet in diameter. The architect proposed to float a rectangular tower encased in concrete and granite, on an east-west axis above the waiting room. The skyscraper was to extend the full width of the terminal waiting room, 309 feet from Vanderbilt Avenue eastward to the roadway between the terminal and the Commodore Hotel. The building was to be 152 feet deep, and the distance between the new tower and the octagonal tower of the Pan-Am building was to be 221 feet, 21 feet more than the width of a city block. The building was to be supported by a central core, containing 52 elevators and other service elements, anchored in bedrock and running upward through the waiting room space. 4 large trusses were to be cantilevered out from the core just above the waiting room to enable elimination of ground level supports.

The waiting room was to be transformed into a vaulted lobby, incorporating building access with a pedestrian walkway leading to the main concourse. The concourse itself, hailed as a great interior space of N.Y.C., would not be impacted by construction of the new building. The architect said he and his associates had gone to great lengths to accommodate the traffic needs of the terminal and the environs in the plans for the new building.

> This time, a major building in New York has been designed with primary concern for its impact on the public,

Mr. Saady pointed out:

> In collaboration with Penn Central management and independent traffic engineers, 175 Park Avenue will bring pedestrian improvements not only for its own population of 12,000 but will ease the general traffic flow through the terminal and the 42nd Street area. 20

The plans included a covered plaza off 42nd Street with a taxi driveway for off-street loading. Pedestrian traffic was to be channeled through a broad lobby at street level, from which escalators would lead to elevator lobbies for the new building and down to the terminal concourse. The new floors were to replace the present waiting room. The lower floor, an extension of the concourse level, was to give two new direct corridor connections to the subways. In addition, two new subway entrances were to be built and pedestrian traffic from the three heavily travelled subway lines - the

Lexington Avenue, 42nd Street Shuttle and the crosstown line to Queens -- was to be rerouted. The new lobby floor at the 42nd Street level was to handle traffic flow to the buildings, subways and the station. Escalators were to be generously used to move people from suburban, concourse and street levels and to the mezzanine level where building elevators were to be located. The 42nd Street sidewalk was to be widened by 50 feet from 23 feet to 73 feet. Stores on the 42nd Street side of the terminal were to be removed and replaced by expanded space for shops and boutiques inside the terminal. There were to be restaurants -- at all price levels -- capable of serving several thousand lunchtime customers.

The consulting engineering firm of Wilbur Smith and Associates, who had carried out a Pedestrian Impact study of the entire terminal area, concluded that the corridor system proposed to tie in the new tower with the new station would provide a more even distribution of people over a greater number of passage ways and would eliminate overloading during rush hours.[21]

Although considerable efforts had been made to retain the terminal's facade as well as to provide pedestrian improvements not only for the projected building's population of 12,000 but also to ease the general traffic flow through the area, the chairman of the CPC, Donald H. Elliott, said next

day:

> Its the wrong building in the wrong place at the wrong time. [22]

However, as the building closely adhered to the zoning resolution, not even requiring a variance, the Planning Commission was not in a position to block its construction.

The Landmarks Preservation Commission indicated its annoyance at not having been given advance notice of the design. A representative for Mr. Saady said, though, that the Landmark Commission members had not accepted an earlier invitation to review the plans while the CPC had. The plans would be submitted as soon as possible, UGP hurried to assure.

The proposal drew considerable fire. "The opportunistic grabbing of an opening in the zoning should be blocked; this commercial energy should be diverted to another site," remarked City Planning Commissioner Walter McQuade in a letter to the New York Times.[23]

- "Hiring a very great architect to design that building isn't enough justification to build it in the first place," said Philip Johnson, the architect.[24]
- "Sophisticated architectural detailing" cannot outweigh a building totally contrary to the spirit of the zoning resolution, the president of the Municipal Art Society wired the Landmarks Preservation Commission, in expressing the organization's "determined opposition" to the project.[25]

- "While many of us deplored the demolition of the Pennsylvania Station, at least it was a clean death and a decent burial. This scheme shames the excellence of the past... Why embarass a gracious old lady by putting a modern giant piggybank on her shoulders."[26]

As Elliott had pointed out, under the rules of the zoning resolution, there was no way to block the building. Within two weeks of Saady's presentation, however, the Planning Commission had a proposal ready that could, if adopted, in effect block the proposed new building. Chairman Elliott conceded that the Commission acted in large part because of the threat of the second skyscraper atop Grand Central.[27] The effect on the planned 55 storey tower would be to cut by 20% its total floor area of 1.9 million sq. ft. (FAR 15) to a little more than 1.5 million sq. ft. (FAR 12). It was intended that the new limit could render the project unfeasible from an economic point of view.[28] Mr. Elliott said the Commission believed it was on secure legal ground in assuming that the rules could be applied to this end. "In many cases" construction had been halted by zoning changes even after actual excavation work had begun, he said.[29]

The Commission's opposition to a second tower astride Grand Central was reinforced by a critical analysis undertaken by Professor Chester Rapkin of the Institute of Urban Environ-

ment, School of Architecure, Columbia University. In "Some Notes on the Transportation Impact of the Proposed 175 Park Avenue," dated July 2 1968, Professor Rapkin acknowledged that "the proposal provides for a number of major improvements in the circulation pattern and in the access to and exit from the terminal" and that the developer "has generously offered to include these at his own cost."

- With respect to the Wilbur Smith Study, Rapkin stated that "it is my impression the traffic burden imposed by the new building will be larger than that estimated by the developer and that the estimate employed a method that understates the added peak load burden."
- He called attention "to the great congestion that now exists on the Pan-Am escalators around 9 a.m."
- He claimed that "the traffic and transportation consequences of the building...point up the urgenc necessity to limit new construction in the Grand Central region."

Rapkin's findings coincided with the announcement, on July 2, 1968, by the CPC, of the aforementioned proposal for a new type of zoning district in which the Commission would be empowered to reduce or increase building size in designated areas by 20%. The amendment would:

- reduce the allowed base density by 20% from FAR 15 to FAR 12
- allow a discretionary increase by Special Permit and subject to Board of Estimate approval, of up to 44% from

FAR 12 to up to FAR 18,

- strip away all as-of-right bonuses, i.e. the arcade and plaza bonus,
- make all bonus awards contingent on Commission and Board of Estimate approval.

The amendment was to be initially operative in three transportation centers. The Grand Central and Pennsylvania Station areas in Manhattan; and the downtown Jamaica area in Queens.[31] The proposed Grand Central District Boundary would run from 39th to 47th Street, between Third and Fifth Avenue, with an extension running west to Ninth Avenue between 40th and 43rd Street. The Pennsylvania station district boundary was to run from Broadway and the Avenue of Americas to Ninth Avenue with the southern boundary at 31st Street and the northern boundary varying from 33rd to 36th Streets.

In explaining the proposed amendment, Donald H. Elliott said:

> The life of the city is tied to its transportation network. Good transpprtation spurs development; over development can overwhelm the system. This is most critically evident at the transportation hubs of the city.[32]

The Commission considered the construction boom on the East Side of Manhattan to have placed a heavy burden on transit facilities in the vicinity of Grand Central, while opportunities for development near other transportation centers had not been fully explored. "The City should be able to respond

to both conditions," Mr. Elliott said. The flexible legislation, the Commission stated, could spur development where suitable and curb it where harmful. "Pedestrian connections to mass transit lines would be encouraged. Design factors would also be evaluated."

In Jamaica, Queens, for instance, the Commission's aim would be to encourage more construction than was permitted under the then applicable rules. The general goals of the proposed Special Transportation District included the following specific purposes:[33]

- To preserve, protect and promote the character and proper functioning of the Special Transportation District as a focal point of mass transportation routes with major interchange facilities;
- to improve circulation patterns in the area in order to avoid congestion arising from the movements of large numbers of people;
- to encourage growth and development activities and facilities which will enhance the districts usefulness in serving large numbers of people throughout the day without overloading its facilities during the peak hours.

In determining the precise extent of the decrease or increase of the FAR, the Commission was to take the following into account:[34]

a) To what extent the proposed use or uses will contribute to peak or off-peak riding on the rapid transit system?

b) Whether, for uses which contribute to peak hour riding, the proposed intensity of use conforms to a level which is generally appropriate for new developments, reconstruction or enlargements within the Special Transportation District in view of the capacity and utilization of the rapid transit facilities by which the district is served?

c) Whether the applicant building makes provision for improved pedestrian circulation to and from transportation facilities?

d) Whether the applicant building will create a well-ordered urban design?

e) Whether the applicant building will tend to preserve, protect or promote the character and proper functioning of the area as a transportation hub?

Hearings were set for July 31.

The nine member Urban Design Council, established by Mayor Lindsay to serve as a study and advisory body on the quality of both public and private design and planning in the city, urged that the city use all of its power to prevent construction of the proposed tower. Should the construction of the proposed skyscraper be "inevitable" the Urban Design Council said, "the landmark building should be sacrificed so

that there would be free rin to design a building combining unity with beauty and function and dealing with the congestion problem with maximum effectiveness."

The problem raised by the second Grand Central Tower, the Design Council wrote in a letter to the Mayor,[35]

> ...is not the problem of a single building, but an area problem of ciritical importance and requires an area approach.
>
> Even if a building is not built over Grand Central Station, it is most probable that other large new buildings will be built on adjacent sites and will add to congestion in the area.

And Mayor Lindsay said in the second week of July, in making known the Urban Design Council's recommendation, that "the City cannot lightly accept the consequences of construction of this building, profoundly affecting as it does the quality and planning and design in this city."[36]

A WCBS-TV Editorial broadcast on July 19, 1968 pointed out that the Chairman of the City Planning Commission had objected to the proposal as the wrong building in the wrong place at the wrong time and hailed the creation of a Special Purpose District as "an eminently sensible idea."[37]

On July 19, 1968, Wilbur Smith and Associates, in a letter to Morris Saady, took issue with Rapkin.[38] In their view:

> the additional access and corridor opportunity afforded pedestrian movements in the influence area will greatly enhance the flexibility and utility of the Grand Central Station area.

- Professor Rapkin's general point of view did not seem to be verified by factual figures available;
- Rapkin ignored the plans for additional subway lines projected by the Metropolitan Transportation Authority;
- he did not take sufficiently into account the means for bettering pedestrian movement that were developed "that would help considerably in relieving congestion of subway station platforms during peak hours of travel," including construction of new passage ways, installation of escalators, installation and relocation of additional turnstiles and gates, and relocation of stairs.

Attention was called to the fact that the banks of escalators serving exclusively the Pan-Am Building were never crowded, and that while on the Pan-Am side of the station there was only one point of egress, the 175 Park Avenue project side would have five such points.

On July, 30, 1968, on the eve of the public hearings, C. McKim Norton, President of the Regional Plan Association, wrote Chairman Elliott that RPA was not prepared to approve or oppose the Special Transportation District, but would like to assist in improving it.[39] In noting that the proposal bore an important relationship to the carrying out of the proposals in RPA's Urban Design: Manhattan and Jamaica Center reports,

- he said special districts represented "a radical, but potentially very constructive departure from past zoning practice in the City of New York;"
- and agreed that in the light of the sharp contrast between recent Third Avenue, Park Avenue and Avenue of the Americas office development on the one hand and what private enterprise once did in Grand Central and Rockefeller Center on the other, there was a need for an improved regulation process for dealing with development in central business districts of the City.

> Except where there is large-tract public land assemblage, such as in current Lower Manhattan developments, business-as-usual products of the zoning resolution rarely result in well ordered urban design.

RPA was of the opinion that the proposed amendments should not be adopted as they were then being suggested, because they failed to establish sufficiently precise standards to guide development and because the mapping was open to question, especially in view of the sharp reduction in FAR. The points Norton made were subsumed under four main headings:

- The quantity of floor area bonus should be related to public benefit private development costs and be predictable;
- the standards for above and below ground pedestrian space should be spelled out;
- a plan illustrating "well ordered urban design" should be made available for each transportation district;

- the delineation of the proposed transportation districts was questionable.

Norton called attention to the wide discretionary latitude in conferring bonuses and the vague standards for their application. "For example, how can the Planning Commission pass judgment on the proposed new building atop Grand Central as to whether floor area ratio of 12, 15 or 22 would or would not be appropriate in view of the capacity and utilization of the rapid transit facilities" by which the entire Grand Central Times Square district is served? Any such decision could be made to appear arbitrary without specific predictable transportation findings and comfort level standards supprting the choice made.

In order to be able to determine "whether the applicant building makes provision for improved pedestrian circulation," analysis was required in each proposed transportation district determining:

a) pedestrian trip rates generated by various building types,
b) pedestrian trip lengths,
c) major directions of pedestrian flow, and
d) comfort levels of pedestrian density.

Such studies should be concerned with above and below ground movements. The derived standards for above and below ground pedestrian space should be spelled out.

To establish a special permit district, Norton contended, without a plan, leaves the words "well ordered urban design" without substance as a standard. Such a plan depicting the city's intent for each special transportation district should be available for inspection by prospective developers. Norton pointed out that the first stage of such a plan had been prepared by Regional Plan for Jamaica Center. It showed the arrangement of desired building bulks, open space, and transportation access; it linked office buildings to a subway station with ample underground mezzanines open to light and air, served by shops and community facilities. "Floor area bonuses to be given should be predicated on such specifics."

Finally Norton questioned the delineation of the proposed special districts. One would expect, he wrote, that "such districts would be based...on some standard of walking distance from the major facility. It seems rather arbitrary that a new building at Ninth Avenue and 43rd Street should have its floor area ratio reduced 20% but expandable by 44%, whereas a building opposite Pennsylvania Station on West 31st Street is outside special district regulation and advantages."

Norton summed up by saying that the proposed special districts contained the seeds of a new approach to development of the central business districts of New York City, but as drafted they were "subject to being considered unpredictable

and arbitrary."[40]

The Midtown Realty Owners Association representing real estate interests around Pennsylvania Station, in calling attention to the fact that the construction of the Pennsylvania Station Office Building and Madison Square Garden had already resulted in privately sponsored programs to improve the area, objected to the amendment because "the very announcement of a program for such change can result in tenants refusing to execute long term leases, deferral of improvements and relocation to other areas."[41]

> Sympathetic as anyone might be with your concern over a single building proposed for an already congested area, it would appear to us that the Planning Commission's role should not convert our system of government from the rule of law to the rule of men.

The Bowery Savings Bank, owner of an entire block between 7th and 8th Avenue between 33rd and 34th Streets, i.e. immediately to the north of Pennsylvania Station, in opposing the amendment, expressed its concern for continued predictability in the development of real estate.

The New York Building Congress, in questioning the amendment's effect on Midtown Manhattan's corporate headquarters growth, said it would probably be retarded, because multi-million dollar investment decisions would not be made, if subjected to protracted individual negotiations.[42]

The Economic Development Council of New York City believed the amendment would:

- place the Planning Commission under severe pressure for decisions favoring the most intensive use of land permitted under the amendments;
- so disrupt the real estate market in the special transportation districts as to stifle future development;
- force development in areas beyond the district boundaries, which in turn will increase pedestrian traffic and require new transportation accommodations.[43]

The representative of the influential Real Estate Board of New York, in noting that the floor area ratio for commercial zones was pegged so as to make it economical to develop residential properties located in such areas into commercial buildings, said:

> The elimination in the difference between the commercial and residential floor area ratios would make it impossible to proceed with the orderly development intended by the over-all zoning resolution. [44]

No clearer statement could have been made of the underlying intent of the resolution to aid eliminating residences in mixed areas and of the interest of investment builders in it.

> Any reduction in the basic floor area ratio of fifteen times would render uneconomic any new building in our great commercial centers and the growth of these areas would be ended. [45]

Rexford E. Tompkins, Board Treasurer of the Real Estate Board, in continuing his testimony, portrayed in vivid language the potential dangers of the legislation:

> Every Commissioner here, I'm certain, is aware of the pressures that he is subjected to even now under a good, firm, objective set of standards. It's inevitable. People want things. But I tell you that if you adopt this resolution, Ulysses tied to the mast will look like a barefoot boy with shoes on. You just have no idea of the kind of pressure you're going to subject yourselves to. Let's say you have a building that can be built for ten million dollars, and with a 44 percent increase you are already talking about four and a half million dollars. Get into twenty million dollars and you're talking about eight million dollars.

REBNY stressed:

> The absence of objective criteria would discourage new construction and new developments as an investor in acquiring land or assembling will not know what he can build and will be discouraged from going ahead with the venture.
> ...You know, we often laughingly talk about how you sell the Brooklyn Bridge to a stranger. Well, boy oh boy, here's someone who sold the air over Grand Central to someone from England. Well, I think that that man should be regarded as a genius. Instead, we're holding him up here and pillorying him...
> Well, that to me violates fundamental fair play. Here is a man who had a set of rules. He worked under them, and he is producing a building. I don't care what you say. The way I grew up - that isn't fair and this Commission shouldn't be party to it.

The representative of UGP properties, the prospective developers of 175 Park Avenue, said that Mr. Elliott's public acknowledgement that the CPC acted when it did to avert the threat of the Second Skyscraper atop Grand Central was spot zoning in its clearest sense, and spot zoning was contrary to the law.[46] He said further evidence of spot zoning was the

exclusion of Radio City, where density, land values, pedestrian and vehicular traffic were just as great, as immediately to the north of 47th and 48th Street, the northerly boundary.

Richard Stein, a Manhattan architect, in claiming that the boundaries were hard to understand, noted:

> The Port Authority Bus Terminal is included in the Grand Central Transportation District although it is about a mile away. According to the designated boundaries, it influences density two blocks to its north, but not at all to its south. Also, something happens midway in the block between 47th Street and 48th Street, whereby the southerly half is within the magnetic field of Grand Central, but the northerly half is not.
> Penn Station seems to exert its influence largely to the north and east but not significantly to the south and west. From a planning analysis, the boundaries appear arbitrary. [47]

Peter Blake, editor of the Architectural Forum, compared the Grand Central proposal with the General Motors Building, then nearing completion on Fifth Avenue at 59th Street "to illustrate the absurdity of this particular proposal." [48]

> Both buildings will have a daytime population of about 12,000; but whereas the proposed Grand Central tower will be served by numerous subway and suburban lines that will feed into the building directly without causing congestion up and down the sidewalks, the General Motors Building will spill its 12,000 daytime inhabitants onto the surrounding streets on every working day; and these 12,000 people will then have to line up, probably for blocks, to squeeze into the tiny subway entrances that exist in this general area, and are already vastly overcrowded.

The amendment was "ill conceived and hastily drawn" and was a "highly emotional response to one particular proposal that displeases some members of the Commission," he said in claiming that if one were to describe a theoretically ideal site for a high rise office building anywhere in the City of New York, such a description would be "an almost exact description of the Grand Central site especially as it is to be developed."

The hearings were concluded on August 14, 1968. The amendment (CP-20387) was not adopted by the CPC and consequently not acted upon by the Board of Estimate. Subsequently, in the spring of 1969, proposals were made to distribute the air rights above Grand Central in a further attempt to stop the second tower astride Grand Central.

I have argued that the satisficing strategy that led to the 1916 code, created the pre-conditions for a spatial environment with poor environmental attributes. Park Avenue is, perhaps, the most impressive example of a rue corridor created by the 1916 code. The transformation of Park Avenue needs to be seen, in large measure, as a reaction to the poor spatial environment caused by the 1916 code. Moreover, existing residential land-use and the continued existence of rent-control, worked together with the code to create an intensity-of-use that was, from the investors' standpoint, unsatisfactory.

The chapter sheds light on the incremental transformation of Park Avenue as a strategy of increasing the intensity-of-use. The gradual transformation was characterized by the need to test the market and bring in digestible increments of space that could be readily absorbed by the market.

Essential to the strategy was the perceived need for each building to be self-sufficient, i.e. each building would have to relate to its neighbors whether these be redeveloped or not. This circumstance militated against any comprehensive area wide plan with numerous interdependencies between individual buildings.

Rejection of Webb and Knapp's massive Grand Central City project needs to be viewed in the light of the overall redevelopment, from the periphery towards the hub. Instead of a redevelopment strategy under which the key parcel, the air rights at Grand Central, would have been developed first, as under the Webb and Knapp proposal, the reverse strategy was employed, a strategy in which redevelopment was phased to progress from "the outside" towards the "inside," the hub. In this manner, by the time the key parcel at the hub, i.e. over Grand Central, was arrived at, area transformation would have been largely completed. By leaving the key parcel to the last, advantage could be taken of the rise in property values accompanying the transformation of Lower Park Avenue.

Although bulk was cut away at the base, as in the case of the Chase Manhattan Building, it became possible, due to the size of the airrights parcel, to build a tower with large floor plans under the 25% coverage provision of the 1916 code. The turning in plan of the Pan-Am Building through 90 degrees to create a terminal feature for the Avenue, was a logical step to take to maximize the achievable intensity-of-use differential because unblocked vistas commanded higher rents.

Consonant with the phasing strategy was the decision to develop only one part of the terminal's airrights property and to leave a substantial parcel for later redevelopment. Under the new code of 1960, in preparation during the planning of the Pan-Am building, tower coverage provisions were to be relaxed from 25% to 40% of the site. This meant that the second tower could have similarly large floors as the first tower, but on a, by comparison, smaller parcel. Also a 25% coverage tower situated next to a 40% coverage tower, would be more advantageous in terms of spacing than two 40% coverage towers. Thus advantage was taken of the introduction of the new code.

The proposal for the second tower was seen by the Planning Commission as an especially propitious occasion to push for a proposal to increase its leverage over developers and to enhance the effectiveness of its Urban Design Group.

The hasty drawing up of the Special Transportation District legislation and timing of its announcement, is indicative of the perceived need on the part of the city to exploit priority issues and to promote popular causes by riding on the coattails of conventional enlightenment, in order for the city to gain acceptance for measures that would enhance its leverage. The alertness of the city in responding to this opportunity to enhance its leverage is indicative of its lack of influence in drawing up the agenda for the management of the spatial environment.

Chapter 12

The Proposed Special Lower Third Avenue Development District: Combining Remapping with Recapture

This chapter shows how, as opportunities to achieve substantial intensity-of-use differentials become exhausted, pressures are brought to bear for incremental remappings along the avenues to permit private developers to develop elevator buildings at the same densities.

On 23 October 1968, at a luncheon of the Citizen's Housing and Planning Council in the New York Hilton, Mayor Lindsay said there were "hundreds" of sites in every borough where private enterprise could build thousands of units of new housing. They are not being built, he asserted, because zoning restrictions made them financially unattractive. He suggested refinements and simplifications of the zoning laws and bonus incentives to make such sites into "financially feasible sites."[1]

On October 30, 1968, Mayor Lindsay ordered a public investigation of spiraling apartment rent increases of the 400,000 apartments not under rent control. In pledging cooperation with the Mayor's investigation, Edmund McRichard, president of the Real Estate Board of New York, urged, however, that the city amend its zoning laws to encourage the construction of new apartments.[2]

At a conference on November 7, 1968, Mayor Lindsay told the landlords through Deputy Mayor Sweet that "it is entirely possible that some of the rent increases we are seeing today may be the byproduct of the building boom," but he added: "The trouble is that you cannot expect to make up for several lean years all at once without a justifiable public reaction."[3]

Lewis Whiteman, Executive Director of the Investing Builder's Association, demanded extensive remappings to highest densities:[4]

> ...the overwhelming majority of professional men in the real estate and construction industry are convinced that the dearth of new housing construction in New York City is the inevitable result of the policy of the City Planning Commission, and that unless and until the Commission undergoes a change of attitude, no major surge of new housing construction is likely to develop.
> If the city ever hopes to get any significant increase in its housing inventory, we think the time has come for a reevaluation and upzoning of specific residential districts...

On January 29, 1969, the CPC proposed that 17 acres of commercial land along Second and Third Avenues and the Avenue of the Americas or Sixth Avenue be remapped from the existing zoning designations of C6-1 (FAR 6) and R7 (FAR 2.80 - 3.40) to R10, with a maximum floor area ratio inclusive of bonuses of 12.[5] "Rezoning New York City" (1961) describes R10 as "a special, very confined, high-rise apartment house district in Manhattan where greater densities are permitted than would otherwise be desired." The areas affected were:

- both sides of 6th Avenue between 14th Street and 23rd Street,
- Second Avenue from 33rd to 37th Street, and
- Third Avenue from 8th to 15th Street.

The latter strips of land are currently lined with four storey and five storey apartment buildings with retail stores on the ground floors.

Remapping Sixth Avenue would affect 4,200 jobs in low rent loft buildings containing small industries, such as clothing, manufacturers and printers.

"I personally went into these buildings and talked to the managers and they said there was absolutely no place for them to go in New York at this point," City Planning Commissioner Beverly Moss Spatt said. She called attention to the fact that many of the jobs were held by Negroes and Puerto Ricans.[6]

David Shipler, writing in the New York Times on January 30, 1969, reported that sources close to the commission had put terrific pressure on the administration to open the commercial areas because the land would be less expensive than in other neighborhoods. Remapping would have the effect of increasing land values and encouraging the owners of the low-rent buildings there to sell to developers of maximum density apartment buildings.[7]

On February 3, 1969, a public hearing was held on the subject of remapping Third Avenue from St. Marks Place to 14th Street and parts of the Avenue of the Americas and Second Avenue from R7-2 or C6-1 districts to R10.

On February 13, 1969, however, the Planning Commission withdrew the proposal to remap the nine commercially mapped blocks on Sixth Avenue to R10. The AIA Guide describes the area as "block long ghosts lining Sixth Avenue, recalling the latter part of the 19th Century when this was fashion row."[8] Some of the former impressive stores were Siegel Cooper Department Store between 18th and 19th Streets, currently used by J. C. Penney as a warehouse, and by the NBC as a carpentry and stage set shop; the B. Altman Department Store, also between 18th and 19th Streets; the Simpson Crawford Department Store between 19th and 20th Streets, and U. O'Neill Department Store between 20th and 21st Street. There was Adams Dry Goods Store between 21st and 22nd Streets and finally Stern's Department Store between 22nd and 23rd Streets. Chairman Elliott gave no reason for backing down on the proposal, except to say that more information was needed. Arnold Yoskowitz, in a survey for the Citizen's Housing and Planning Council, writes that talks with union and industrial officials had indicated that there were few suitable sites within New York City for relocation and that the bulk of these firms would leave the

city for suburban industrial parks.[9]

50% of the firms in the area are in the apparel industry, 20% printing and 30% in manufacturing services. Total number of jobs in the Sixth Avenue area -- 100 ft. set-back = 4200, 150-200 ft. set-back = 9500, 450 ft. set-back = 13,500. The J. C. Penny Warehouse building alone employs 1,300 people.[10]

The Commission's selection of these blocks had seemed to be contradictory to its policy statement in the draft of the master plan that:

> many low skilled industrial jobs are in the Manhattan loft area between the midtown and lower Manhattan office districts. We aim to protect this area from redevelopment as long as these jobs are important to the city.[11]

The other two areas on Second and Third Avenues were retained and a hearing was scheduled for Feb. 19, 1969. At the hearing, there was strong community opposition which claimed that the proposed remapping would lead to the demolition of needed low-rent housing. The proposal's effect on public facilities, the nearby Cooper Square urban renewal area and congestion, was questioned. Only one speaker appeared in support of the proposal. Frances Golden, a consultant to the Cooper Square Community Development Committee, said the talk of rezoning had already boosted land values in nearby blocks where city aided removal was about to get underway just south of the area in question.[12]

Several members of the CPC's professional staff accused the Commission of disregarding planners's findings and of yielding to powerful real estate speculators. "Real estate speculators," their statement said, "wanted to take over valuable inner city land where poor and working people live and work, to construct profitable housing for rich people. City Planning department staff determined that such a take-over was against the best interests of everyone except the real estate interests and their corporate allies."[13]

The staff people, members of a group that called itself "the urban underground," submitted a petition containing 113 signatures at least 25 of which were by commission employees. The planners claimed that the Lindsay administration, under pressure to produce more housing, had overridden the staff's recommendations. One of the members charged:

> We have been asked to violate our personal integrity by justifying decisions to the public on a technical basis when they were made on a political level in the Mayor's Office. We have been asked to conceal information, which should be available to the public.[14]

Chairman Elliott was upset by the attack. He did not discuss the allegations at the hearing, but he did subsequently ask critical staff members to substantiate their charges.[15]

> I am accused of making political decisions. If that was true in the sense of votes, for example, why should we zone anything for high income housing? There's no votes there.

His interlocuters shot back that while high income housing might not produce votes to keep the Mayor in office, it did, however, generate campaign funds and support for him. To this the Chairman replied:

> Every sophisticated person knows that the big money contributors, the builders, the corporations, give money to both sides in a campaign in a city like this - not just to the man in office.

The New York Times, in calling the problem "a complex one" that had "been made more thorny by the fall-off in all kinds of residential building as a result of zoning and code limitations, the spiraling cost of construction and the tangled web of rent control," maintained that:[16]

> under these circumstances, it is unnecessary and unfair to accuse Donald H. Elliott, Chairman of the City Planning Commission, of being in league with real estate speculators, because he favors rezoning, as some of the speakers at a City Hearing did Wednesday.

The editorial continued:

> Nevertheless, the petition signed by 113 planners, including 25 members of the City Planning Commission's own professional staff, should not be ignored. Their contention that rezoning would take away valuable inner city land where poor and working people live and work, to construct housing for rich people, must be either disproved or heeded.

The day after the hearing, Mayor Lindsay said he thought the Planning Commission's hearing on proposals to rezone parts of Lower Second and Third Avenue for luxury housing was entirely appropriate. The Commission and he were in entire accord. The Commission took no action on the proposal. It undertook a study to review the basic issues raised at the public hearing.

Mayor Lindsay had ordered the real estate industry to come up with a plan to regulate rents of non-rent-controlled apartments by March 1. He also released a study by his housing aides advocating the kind of remapping the Planning Commission was considering on 2nd and 3rd Avenues.[17] The real estate industry took the position that the healthiest way to stem the rent spiral in the 600,000 apartments not under control was to increase the supply of housing by encouraging more private construction. In addition to remapping, the real estate industry was calling for relaxation of the zoning regulations passed in 1961 that limited the percentage of a site on which a building could be erected. But Mayor Lindsay said: "Any pressure exerted by landlords to change that law must be resisted."[18]

A. L. Huxtable called the controversy about the CPC's proposal to remap parts of Lower Second and Third Avenues for new R10 luxury apartments "only the tip of the zoning iceberg."[19]

"Under the muddy political waters," she continues in an article entitled "Pressing the Panic Button on City Zoning," lie three very important intimately related issues:

- the present insolubility of the city's housing needs by any currently available methods, techniques or devices,
- the political implications of the unsolved housing crisis for the Lindsay administration seeking re-election,
- and the question of whether the proposed zoning changes will ease the crisis.

She calls attention to the fact that for those who would be dislocated by the new high rent construction, there would be no replacement housing. "Adjacent areas - such as the moderate-income Cooper Square neighborhood, which has been struggling with its own bootstrap renewal for a decade - would be subject to land value increases that would lead to their speculative destruction."

She concluded that "the proposed avenue rezoning is frankly a token gesture to the real estate community, which is making its desire for a great deal more rezoning felt politically."

Roger Starr, Executive Director of the Citizen's Housing and Planning Council, in a letter to Donald H. Elliott, recommended that all vacant housing sites on Manhattan avenues and as many sites on side streets as possible, be remapped to allow for luxury housing.[20] This meant raising

allowed densities from 135 two bedroom units per acre (R7) to R10 permitting 320 units per acre:

> If the city is going to attract people with money -- which means jobs for people without money -- it's got to provide luxury housing. You've got to have luxury apartment houses in which top executives can live. This is a major factor in a company's decision to move to New York. If we don't have luxury, private buildings to take care of top executives, the expansion of industry in the city will become impossible.

- Mr. Elliott said he strongly disagreed.
- Councilman Carter Burden, a Manhattan Democrat, in a letter to Elliott, called Mr. Starr's rezoning plan "an unqualified outrage," because it would virtually insure that Manhattan will "become little more than a sterile ghetto of high rise luxury apartments and office buildings in the future."
- Councilwoman Greitzer said rezoning "would serve up on a silver platter an irresistible temptation to landlords to accelerate the destruction of good middle-income housing."

Frank S. Kristof directly attributed the dearth of privately financed fully tax-paying new apartment construction to the adoption of the new zoning resolution in 1961.[21] The combined effect of high interest rates, lack of mortgage financing and increased construction costs did not prevent the national rate of private new apartment construction from reaching a record level in 1969. At the same time in New York City it had fallen from 6% of the nation's apartment construction, between 1950 and 1962 to less than 1% from

1968 to 1970. Forces were at work that were absent in the nation at large. The major single differentiating factor was the adoption in December 1961 of the city's new zoning ordinance, he asserts. Professor J. T. Howard of M.I.T.'s Department of Urban Studies and Planning, in questioning Kristof's comparison of United States Building Permits with New York City completions in the period from 1950 to 1970, in which suburbs and central cities are lumped together to get the U.S. total, suggests a more relevant comparison to make would be between N.Y.C. and other central cities.[22]

Results of a study by Frank S. Kristof indicated that the supply of R10 sites on Manhattan should be tripled to accommodate demand for private new construction in the city. If this were done, then the supply of private new apartments in Manhattan would jump from the current level of 1000 to 1500 to a level of 5000 to 6000 annually in a short time, Kristof claimed.[23]

A. L. Huxtable, in calling attention to the many available R10 sites on the upper East and West sides, pointed out that the developers did not consider these ripe for luxury housing. Yoskowitz reports that Daniel Rose of Rose Associates, after studying a small sample of the available R10 sites in Manhattan, concluded that most of them were not available for sale to builders for the purpose of erecting

new luxury housing.[24] The reasons included long term leases with tenants in posssession, sites designated as landmarks, sites owned by government, sites that were too shallow for proper development, sites in midtown that were being held at high prices by owners for future commercial developments.

Richard Scheuer, a major developer, stated: "I do not know of any building going on in Manhattan in anything less than R10 zoning."[25]

In a study undertaken by the Donald Zucker Co., a leading mortgage brokerage firm, 15 major institutional leaders active in the New York apartment market were surveyed as to the availability of money for apartment construction.[26] All reported that adequate monies were available and they considered a mortgage loan for a privately sponsored apartment house in Manhattan as one of the most desirable mortgage loans. While money may cost more, Mr. Zucker noted, it is available. The problem, rather, was "to find suitable land zoned so that development would be economically feasible."

In conjunction with his findings, Zucker noted that only 13 apartment buildings with 3,410 units had been completed by 1969 under the new ordinance introduced in 1961.

In January, 1969, Neil Gold and Paul Davidoff of Planners for Equal Opportunity presented a memorandum to the Department of City Planning on Special District Zoning in Manhattan.[27] The memorandum was submitted at the request of

the Office of Manhattan Development, then headed by Richard Weinstein, who had asked for Neil Gold's and Paul Davidoff's views respecting the proposed Special Lincoln Square Center District. In the memorandum, Davidoff and Gold proposed utilizing the City's zoning laws "to develop low and moderate income housing at no capital cost to the City or to the Federal Government."

They took the point of view that:

> If it was proper to demand that developers in the Lincoln Center District included arcades, plazas and gallerias in return for an increase in floor area, then it was also proper to demand that these same developers lease a portion of their units to the City Housing Authority in return for a similar increase in floor area.

The authors pointed out that such units could be provided either in the development or elsewhere in the Special District.[28]

Subsequently, Borough President Percy Sutton prevailed upon Chairman Elliott to accept the proposal for incentive zoning on a non-mandatory basis in the Lincoln Square Special District. Chairman Elliott pledged that the proposal would be included on a mandatory basis in legislation being prepared for the area between 59th Street and 72nd Street on the West Side.

Rose Associates were owners of properties on Lower Third Avenue and at other locations in the vicinity that they had acquired at prices reflective of R7 mapping, but in anticipation of remapping to R10. Planning Consultant Walter Thabit wrote that if Third Avenue is rezoned, the value of these luxury housing sites could skyrocket from an original $25 per sq. ft. (now $50 as site assembly has taken place) to $100 per sq. ft. or more, boosting land values and their assessments throughout the area.[29] Rose Associates prepared to seek a variance from the Board of Standards and Appeals to develop at R10 densities.

Milton Glass, chairman of the Board of Standards and Appeals, was known to favor granting of variances if the developer could demonstrate economic hardship. The CPC was growing increasingly sensitive to the Board of Standards and Appeals taking the initiative away from the CPC. Said Michael Cortland of the Urban Design Council: "It did not look good if the BSA undermined the zoning."[30] In the case of the Lincoln Square Special District, for instance, the Planning Commission had been embittered at the fact that the Milstein interests had sought and been granted a variance from the BSA, thus undermining the Special District legislation. The Planning Commission appeared to be on the horns of a dilemma. On the one hand, it did not wish a repetition of the debacle of the previous February. On the other hand,

if it did not act, Rose Associates would seek a variance from the Board for its avenue sites. In that such of Manhattan's avenue frontage areas was mapped at R10, such a request would not necessarily seem unreasonable. In their application to the Board for variances at 39 - 45 Third Avenue (549 - 69BZ) the appraised value of the land was given as $1.7 million or about $70 per sq. ft. "No one in his right mind would think of paying anywhere near that much for land he intended to develop at R7 density," Commissioner Beverly Moss Spatt quipped laconically.[31]

On April 13, 1970, the Commission announced details of a proposal for a Special Lower Third Avenue Development District. It scheduled a public hearing for May 13, 1970. According to Beverly Moss Spatt, the plan was apparently revived as the result of private meetings held by Mr. Elliott with "those people interested" in the zoning change. Mrs. Spatt said the commissioners did not attend these meetings and were not "privy" to what occurred at them. She said that she herself had asked to attend, but that the "request was not honored."[32]

With the exception of the Cooper Union Building at 9th Street and a fine 20 storey apartment building on 10th Street, the area mostly contained 3, 4 and 5 storey structures with ground floor commercial occupancy. The physical condition of most of these buildings left much to be desired. There were also a few vacant lots used for parking.

Significantly, remapping of Second Avenue sites had, however, been excluded from the proposal. Alpern, in reporting on conversations held in March 1969 with E. Friedman and Millard Humstone, claims that Second Avenue densities were to be kept low as a holding action to prevent residential development, pending eventual office construction, in anticipation of a strong continued demand for office space.[33] Under the proposal, Special District regulations were to supersede or supplement certain regulations of the C6-1 and R7 - 2 districts upon which the District was to be superimposed. The special zoning was to apply to a depth of 125 feet on either side of Third Avenue in the following areas: On the west side between 10th and 14th Streets except for two sites between 10th and 12th Streets reserved for public housing, and on the east side between St. Marks Place and 14th Street. Designed to promote and protect public health, safety, general welfare and amenity, its general goals included the following specific purposes:[34]

- To promote the character of the Special Lower Third Avenue Development District, as a prime location for new housing developed in accordance with a comprehensive plan;
- to insure a balanced and heterogeneous population for the area by providing dwelling units at varied household income levels;

- to conserve and increase the supply of moderate and low-income housing units in the City of New York, by requiring new development to assume its fair share of the burden of replacing demolished and moderate and low-income structures in the area:
- to improve circulation patterns in the area by requiring uniform sidewalk widening and mandatory arcades and encouraging the provision of public open space as a related part of new development.

Under the plan, more low-income and moderate income dwelling units than existed within the Special District area would be provided for. Chairman Elliott said:[35]

> The new zoning will insure that needed new housing can be built through private redevelopment while increasing the total supply of low-income units in the area. There will be more apartments here for people of all income levels and a greatly improved environment.

To obtain R10 mapping, developers would have to reserve part of their units for low or moderate-income tenants, or contribute to a special fund for acquiring two designated low-income housing sites on the west side of Third Avenue between 10th and 12th Streets.

The Commission, in noting that the density which would be attained upon full development of the Lower Third Avenue area would not be greater than densities permitted along many wide streets and avenues and that many of these existing high density areas suffered from pedestrian congestion on the

sidewalks, found that the high density redevelopment of the Lower Third Avenue area would be acceptable from the standpoint of the physical environment, if certain amenities were provided within the Special District:

- On the west side of Third Avenue, each new development would have to provide a sidewalk area 10 feet wider than normal. A bonus of six square feet of floor area per sq. foot of widened sidewalk was to be provided.
- On the east side of the Avenue, each development would have to include an arcade at least 10 feet in depth. Since the arcade was to be mandatory a bonus of seven square feet of floor area per square foot of arcade was to be provided in the Resolution for arcades constructed at the developer's option.

The proposal promulgated the rue corridor.

Under the first option, the developer might include in his development "low and moderate-income housing units" occupying at least 15% of the development's residential floor area. A "low or moderate income housing unit" was defined as:

- any dwelling unit receiving financial assistance from the Federal, State or City Government under any government housing program, or
- any dwelling unit in a development which is rented at a rate no higher than 50% of the average rent or carrying

charge of all other similarly sized units in the development which are not publicly or privately subsidized.[36]

The figure 15% was selected because it was an approximation of the ratio of the number of existing non-luxury dwelling units within the Special District area (284) to the number of units that could be developed on the eight private sites in the district of R10 densities (1937).

Under the second option, the developer was to pay the city a percentage of the estimated cost of acquiring the two sites within the Special District on which the New York City Housing Authority was to construct a public housing project. The "public housing site's acquisition contribution" was to be equal to twice the combined assessed valuation of the two sites designated for public housing multiplied by the ratio which the portion of the lot area of the development within the Special District bears to the total lot area within the Special District, but excluding the public housing sites and all streets. If, for instance, the developer's parcel contains 10% of the privately developable land within the Special District, the developer must contribute 10% of the estimated acquisition cost of the public housing sites to be eligible for the R10 density bonus.

In this manner, the city would be able to acquire land at virtually no cost, that it would otherwise not have been able to acquire because of established city policy militating against high cost land acquisitions. The city would be reimbursed over time as the Special District was redeveloped. In the event that all developers within the Special District chose to include low-income and moderate-income units in their developments, the city would have to absorb the total land cost of the public housing project. Fred Rose of Rose Associates has observed that the option of inclusion of 15% public housing units is, in fact, a red herring because it would not be possible to get a mortgage on a fixed rent. Developers would rather seek to meet their obligations by contributing to the public housing site acquisition funds than mix income groups in their own developments.

In an attempt to head-off allegations that zoning rights were being sold, the city's lawyers likened the proposed technique to a planning control frequently employed in suburban subdivisions. Under it, suburban communities require, through subdivisions regulations, that developers of large land tracts absorb a percentage of the costs attributable to their development burden, which would otherwise have to be borne by the public treasury.[37]

The CPC cited the example of Jenad Inc. vs. Village of Scarsdale, 18 N.Y. 2d 78 84 (1966). The New York Court of Appeals had upheld a requirement by the Village of Scarsdale that a sub-divider contribute a portion of his land for a public park, or alternately, pay the village a sufficient amount to enable it to meet the recreational needs of the subdivision residents, a burden which, as the Court noted, would otherwise have fallen on the village treasury. By the same token, the Commission argued (CP 21197) that developers within the proposed Special Lower Third Avenue Development District be required to replace the low-income and moderate-income housing units which they demolish during redevelopment. Otherwise, the burden of replacement of the low-income units would likewise have to be solely borne by the City.

The Commission argued that if it were to remap the area in question to R10, it might be assumed that over time, every one of the existing 338 low or moderate-income units, as well as 144 units used for single room occupancy, would be replaced by units renting at open market -- that is to say, luxury -- rental levels. Such a result, the Commission argued, would be self-defeating from the standpoint of the city's overall housing policy.

> The housing shortage in the one rental class of luxury units would be alleviated only at the expense of further aggravating the shortage of low-income and moderate-income housing units throughout the City, and particularly in the lower East Side area. An unguided R10 rezoning would repeat the tragic pattern of the early days of urban renewal; displacement of poor, on site residents to make land available for new uses benefiting the affluent. The City's responsibility for such a result along lower Third Avenue would not be lessened by the fact that it "merely" stimulated private redevelopment through zoning, rather than directly ousted the area's residents through condemnation. Thus, if a method could not be found to allow high-density redevelopment without producing a significant loss of low-income and moderate-income housing units, the Commission would leave the existing C6-1 and R7-2 zoning in effect rather than initiate a higher density zoning amendment.

At a 5 hour public hearing held on May 13, 1970, the proposal drew fire from both neighborhood groups and a professional group known as Planners for Equal Opportunity. A few citywide civic and housing groups supported the plan. Roger Starr of the Citizen's Housing and Planning Council and a representative of the Women's City Club, ignoring boos and catcalls, said the plan would provide much needed housing.

While representatives of the Commerce and Industry Association, the Real Estate Board of New York and the New York Building Congress were in favor of remapping to R10, they opposed the provisions requiring developers to include low-income or moderate-income apartments in their buildings or alternately, bear part of the cost of replacing the low

income and moderate income housing units which would be lost as the result of private redevelopment.

Representative of their position are the following excerpts from the Statement of the Commerce and Industry Association of New York, Inc.[39]

> We favor more R10 districts. The city is in need of more housing and the practical realities of the day demand the establishment of these districts if the private sector is to construct them on an economically feasible basis. Our opposition is based rather on the principles involved. We believe in government by laws, not men. We believe in a Zoning Resolution based on the use of objective standards. We are opposed to spot zoning, to the sale of zoning, and to negotiated zoning. It is also our firm conviction that public housing is a responsibility of all elements of our city and that its cost should not be levied against any selected small group of our citizens.
>
> The amendment before you today violates all of these principles.
>
> Each building developed in the area would be forced to seek a separate special zoning permit which may or may not result in a structure with R10 allowances. This clearly is spot zoning. Moreover, even if the applicant meets the sale price and other requirements of the amendment, there is no assurance that the permit would be issued because of the language leaving such issuance in the discretion of the Commission. This spells negotiated zoning. There is no hint of what other demands the Commission might make in negotiation for issuance of the permit. This is government by man and by gamble, not by law.
>
> That this amendment provides zoning at a price is patent and blatant -- and the price is stated on its face. And that price, in the form of what is termed a "public housing sites acquisition contribution," is nothing more than a tax upon the tenants of the individual structure for public housing purposes. This is true whether the price is paid in cash or by way of the reduced rental provision for the designated percentage of floor area. That tax obviously is by way of rental

> increases necessary to carry the increased cost. Public housing is a responsibility of the entire citizenry -- not of a small selected few.
>
> If the CPC believes the area involved should be designated an R10 District -- and that really is the thrust of the entire Resolution -- then let it make the zoning change necessary to that end directly, clearly and unequivocally.

Congressman Edward Koch, Councilwoman Carol Greitzer and Councilman Carter Burden let it be known that they opposed the Special District on the grounds that it did not provide enough low-income or moderate-income apartments, but rather was a device to promote construction of luxury housing. District 65 of the Wholesale, Retail, Office and Processing Union, the Metropolitan Council on Housing and several individuals, concurred with this viewpoint. Instead, they favored either maintenance of the status quo or City action to encourage or finance construction solely of non-luxury buildings within the Third Avenue area. These speakers also opposed the high density allowed within the Special District.

Testimony in favor of the proposal was frequently interrupted by noisy comments and shouted insults. Epithets such as "pig", "honky" and "vampires" were heard. The Commission itself was accused of using "oppressive tactics". Mrs. Jane Benedict of the Metropolitan Council on Housing shouted: "You are provoking a squatter movement in this city because there is no place to move". This was a time of agony when low-income and moderate-income people were being

harassed out of their homes to make way for developments, she said.[40]

Opponents said that the proposal was a give-away of immensely valuable zoning rights to real estate developers in exchange for which the developers would contribute relatively small sums for a pittance of public housing. Neil N. Gold, a spokesman for the Planners for Equal Opportunity, claimed the proposal would give Rose Associates and other potential developers an annual return of more than $1 million for 40 years. In return, they would be paying only $2.8 million altogether toward acquiring the public housing sites.

In a memorandum submitted to the Planning Commission in May 1970, Neil Gold and Paul Davidoff claimed that the proposal to use incentive zoning to create low cost housing was "quite clearly" based on their memorandum of Jan. 1964.[41]

> We point out the paternity of the Department's latest proposal -- not out of price, but out of profound regret that the intent of our work has been perverted to the point where it is likely to accomplish more harm than good.

- Since the rent in the privately financed structures was anticipated to average $150 per rental room, the alternative proposal under which developers might set aside 15% of the floor area for apartments at rentals of up to 50% of the average rent of all similarly sized units, would lead to rentals of an average of $75 per room. "Clearly, this is neither low nor moderate income housing."

- Since nearly all of the buildable sites in the proposed Special District had been bought by private developers at prices reflecting existing mapping, the developers would reap windfall profits (a) on the increase in land values, and (b) from the higher cash flow that would result from the construction of the 1250 units permitted under the new zoning.

Gold and Davidoff, in their analysis of the fiscal implications of the proposal, took into account the proposal's impact on the projected land value increment and the projected increase in developer's income.

The land value subsequent to remapping is dependent on the number of residential units permitted in the Special District and the value per unit or per rental room that can be allocated to land in negotiating a mortgage. With 1930 units of luxury housing, each carrying an allocated land value of $10,000 (assuming an average of four rental rooms per unit), the minimum value of the 8 sites subsequent to remapping would be $19,300,000. Taking the existing market value of the land to be $9,300,000 -- the combined assessed value is $5,760,000 -- the land value increment amounts to $10,000,000. "Although it is value created wholly and in full by public action," Gold and Davidoff indignantly note,

"the entire sum of $10,000,000 will be pocketed by five or six developer-speculators who purchased the land in expectation of rezoning to R10."

In estimating the projected increase in developer's income under the Proposed Special District, a development cost of $40,000 per unit, consisting of four rental rooms, was assumed. This figure includes land, construction costs, and carrying and financing charges at the prevailing market rates.

The total development cost is the number of units multiplied by the development cost per unit. I.e. $40,000 x 1,250 = $50,000,000. The developer's equity would be $5,000,000 if, as can be expected, mortgages covering 90% of total development cost are secured. Assuming the standard return on equity in new luxury housing of 13.5%, developer's annual return on their $5,000,000 equity was estimated to be $675,000 ($5,000,000 x 13.5). The depreciable asset is derived by subtracting the land cost of $12,500,000 from the development cost $50,000,000. Assuming straight line depreciation over 40 years, annual depreciation will amount to $937,500. $\left(\frac{37,500,000}{40 \text{ years}}\right)$

Assuming that developers in the Special District will be in the 50% tax bracket and will have aggregate other income which can be offset by a depreciable asset of $937,000 per year, then, according to Davidoff and Gold, income resulting from

depreciation will be at least one half of $937,500 or $648,750. Total annual income accruing to developers would then be the sum of the return on equity and income resulting from depreciation, i.e. $675,000 return on equity plus $468,750 income resulting from depreciation, equals $1,143,750 total annual income. Over the 40 year depreciable life, this amounts to $45,750,000. Added to the land value increment of 10,000,000, a total of $55,750,000 exclusive of interest, is arrived at. Gold and Davidoff contrast this sum with the $2,950,000 contribution toward the public housing site acquisition fund. "Clearly, this is one of the best arrangements ever offered to private developers by any public agency in the nation."

Enactment of the proposal would lead to:

> The wholesale transformation of the social character of the district from a predominantly low and moderate income area to a predominantly upper income area.
>
> An increase in land values along the blocks contiguous to the District which will create irresistible incentives for the replacement of structures presently providing housing for low and moderate income families with structures for household capable of paying luxury rentals. The replacement of neighborhood stores serving low and moderate income clientele with stores serving upper income clientele, raising prices for the district's present residents.

In claiming that the plan was an "outrageous gift of public benefits for improper public purposes," Neil Gold and Davidoff suggest that the need for low and moderate-income housing, in the Special District, would be met more adequately and at less cost in terms of bonuses to the developers.

Their proposed alternate plan would consist of the following steps:

- The city would designate the Special District as an Urban Renewal Area.
- The city would then acquire the 10 sites in the district at their market value,
- and remap the four sites between St. Marks Place and 12th Street on the easterly side of Third Avenue from R7 to R10.

Rezoned to R10, these sites could accommodate 1120 units of luxury housing. Each of these 1120 units would carry a land value of $10,000 or $11,200,000. Consequently, they maintained the minimum land value increment that would be created by remapping would be land value under R10 ($11,200,000) minus land value under R7 ($3,800,000) which equals $7,400,000.

- The city would then resell four of the sites at their value for luxury housing or $10,000 per unit. This would amount to $7,400,000 -- the land value increment.
- The land value increment of $7,400,000 would be applied to the purchase of the remaining six sites, whose combined assessed valuation is $5,100,000 and whose estimated market value is $8,200,000. Consequently, an additional $800,000 would be needed to complete the purchase.
- To raise this amount the developers should be required to pay into a public housing land acquisition fund, a sum of money equal to $8 per sq. ft. of remapped land, as

opposed to $15.30¢ under the CPC plan. The combined contribution of the four sites would be four times $200,000 or $800,000.

- The city should designate the City Housing Authority, or a turnkey developer, to construct the 1200 units of public housing, on the remaining six sites.

Gold and Davidoff note that the developers led by Rose Associates, in seeking remapping, argued that they needed an increased number of apartments to make their developments economically feasible. None of them, however, maintained that they were entitled to the land value increment that would be created by remapping, Gold and Davidoff stressed. In consequence, they followed, "the developers cannot and will not oppose the city's recapturing the land value increment for public purposes. Furthermore, they cannot and will not oppose the provision in the alternate plan under which they would pay $8 per sq. ft. to the public housing site acquisition fund, as opposed to the $15.30¢ per sq. ft. they would be compelled to pay under the current plan."

The authors of the plan concluded that the developers would be able to realize a greater profit on the remapping to R10 under their alternate plan than under the city's plan. "However, the developers would not share in any way in the land value increment created by public action."

On Wednesday, May 25, the hearing was reopened. About 100 businessmen, artists and residents in the lower Third Avenue Area had formed a group -- the Third Avenue Businessmen's, Artists' and Tenants' Association -- to fight the rezoning plan. "We do not welcome luxury apartment speculators masquerading behind token public housing," they said in a statement. They said they hoped to work with architects and other professionals, as well as officials of the Housing Authority, to draw up alternative plans that would enable construction of more low-income and moderate-income housing while avoiding displacing residents by building first in vacant areas.[42]

Both the Third Avenue Group and the Cooper Square group asked for a postponement of the hearing until September or October to give them more time to develop alternative plans. They had with them a statement bearing the names of various civic organizations, the Museum of Modern Art and also of wellknown politicians (Paul O'Dwyer and Bella Abzug) in which the hearing was denounced as a fraud. The statement said the Commission's "hypocrisy" had forced the community to carry its fight to the public.

Residents had declared their intent to set up various community facilities to vacant property. One such facility was "a squatters park" on a lot at the corner of 10th Street and Third Avenue. But the owner destroyed the park and put

a fence up around the property. The main goal of the effort, explained a resident of the area, was to rally the community and call attention to its plight.

"A second phase of renewal in Cooper Square to the south may never be realized if the Third Avenue rezoning proposal is approved," wrote Walter Thabit, the Cooper Square Community group's planning consultant and President of Planners for Equal Opportunity, in an article entitled "Incentives to get Housing in City Court Disaster," in July 1970.

He charged that luxury builders wanted to turn the whole area into another high rent district, and wanted the side streets and Second Avenue rezoned to R10 as well. Each of the eight builders stood to make up to $1 million in unearned profits in land, even after making the required public housing contribution of about $350,000, he said. "If Third Avenue is rezoned, the value of these luxury housing sites could skyrocket from an original $25 per sq. ft. (in 1970 $50 per sq. ft. as site assembly had taken place) to $100 per sq. ft. or more, boosting land values and tax assessments throughout the area."

He attributed the following developments in the area to the prospect of rezoning:

- Landlords selling to speculators
- Landlords keeping their apartments off the market.
- High rent renovations ($220 for an efficiency unit) had been

made in some buildings and were being contemplated in others;

- higher rents and site assemblages forcing out many book dealers on neighboring Fourth Avenue.

A spokesman for the CPC commented that the opposition of the members of the Cooper Square Group stemmed from the fear that increased real estate values along Third Avenue would endanger their development plan for an area around Cooper Square and along the Bowery, which, following a 10 year controversy, had been finally approved in February 1970. That fear was unjustified, the spokesman said, because the city was committed to that plan.[43]

The parcels designated for the projects would be acquired, regardless of any increase in their value, resulting from the proposed Special District amendment. But the Cooper Square Community Group's planning consultant, Walter Thabit said a second renewal stage would also be endangered. Other questions raised at the hearings were:

- Would high-density redevelopment of the area result in crowding and congestion?
- Would the public facilities in the Lower Third Avenue area be sufficient to support high-density residential development.

Full development of the lower Third Avenue area would lead to an increase of approximately 2,000 dwelling units, or about

6,000 persons.

- On the basis of guidelines established by the Board of Education, the Commission reached an affirmative conclusion with respect to the ability of available schools to absorb an increased school population.
- As for public transportation, the Commission found that the Special District was centrally located and well served by buses and subways. This service would be improved with the completion of the Second Avenue Subway. Existing service, however, was considered sufficient to support high-density redevelopment.[44]
- With respect to recreation, the Commission noted that the proposed Special District was within easy walking distance of neighborhood parks at Washington Square, Tompkins Square and Stuyvesant Square and was near the East River Park. The District regulations made provision for additional public open space on the public housing sites.[45]
- Police and fire protection, sanitation, sewage, water supply, postal service, hospitals, clinics, were considered to be adequate.[46]
- While many retail stores existed close by along 10th and 8th Streets, the Commission anticipated inclusion of additional facilities as redevelopment in the District progressed. The only supermarket existing in the area would not have been adequate alone to serve the increased population within

the Special District.[47]

The Commission, in finding that the achievable density upon full development of the Lower Third Avenue area would not be greater than permitted or existing in Manhattan along many wide streets and avenues, noted that many of the existing high density areas suffered from pedestrian congestion on the sidewalks.

The Commission noted that the mandated provision of

- a sidewalk 10 feet wider than normal on the west side of Third Avenue, and
- an arcade at least 10 feet in depth for each development on the east side of the Avenue, would provide a significantly larger circulation area than would be the case if redevelopment took place on a parcel-by-parcel, uncoordinated basis.
- The arcade would afford protection from the elements during inclement weather and make the ground level retail facilities more attractive.[48]

Commissioner Spatt charged, however, that with the exception of design studies, the Commission had made no study of the impact of extensive rezoning to R10. "What will be the effect on people, on services, on systems," she asked in her dissenting report entitled "A Mess of Pottage":[49]

> One wonders how the majority report can state that public facilities such as fire, public sanitation, sewage and transit are adequate to service the

> increased population. The Office of Midtown Planning publicly admits that the infrastructure of Manhattan has already passed the margin of safety...The basic question is what kind of a city do we want. What shall be the quality of urban life?

On August 12th, over protests against "selling zoning" and "deforming the city physically and socially," the CPC, in an unusually close 4 to 3 vote, approved the Special Lower Third Avenue Development District.

Commissioner Walter McQuade, one of the dissenters, in pointing out that "as we all know, there is quite a lot of acreage zoned R10 on Manhattan," said that the problems to building on it were threefold:[50]

- The present high interest rates charged for mortgage money;
- the high asking price by the owners of the land zoned R10;
- the very high costs of construction.

> The bankers will not budge on their interest rates to builders. The landowners will not come down in their asking prices. The contractors, suppliers, and construction trades certainly will continue to get everything they can... Zoning should not be bent to solve what is really a cost problem; there is the danger of deforming the city physically and/or socially.
>
> I do not believe the big dumbly designed new apartment houses now conventional to R10 improve most New York neighborhoods physically, or in spirit. I share the reaction of other middle class people to these high undistinguished cliffs filled with apartments renting for nearly a thousand dollars a month. These buildings are excessive with their rooftop swimming pools and saunas, their pretentious little curved driveways, interfering with pedestrians and street traffic. We are told eloquently these buildings are essential to house the executives of the businesses, which make Manhattan prosper. I don't believe that. Most of the

> executives I know avoid them. Instead you find squadrons of airline hostesses, which is fine, and less good, hardpressed families, who cannot really afford these rents.

Walter Thabit had voiced a similar view earlier in the columns of the New York Times. In charging that the idea that more housing at such high rent levels would result in more housing for the less affluent via the trickle-down theory was pure nonsence, he said, and that, in effect, a "trickle-up theory" was at work:[51]

> Less affluent people desperate for housing are forced into luxury buildings and pay far more rent than they can afford. Among others, medical personnel, airline hostesses, young executives and even couples have been doubling, tripling and quadrupling up in luxury apartments in order to pay their rent.

McQuade also questioned the arithmetics of the proposal:

> If this land is rezoned R10, I think you will see the asking price jump a multiple of that $15 per square foot.

He said he was in favor "of having the city share the increment of value added when land is rezoned, by insisting that the owner compensate by making investments in amenities which will benefit the city as a whole. These would include such things as subway access, or open space." Nonetheless, he was against "the game of rezoning for cash considerations, however well that cash is to be used."

Finally, he said the amendment would work to create a very high density housing district, housing only the very rich and the very poor, because developers would choose the option

of paying cash to the public housing site fund, rather than subject their apartment house to formal rent surveillance by including 15% non-luxury rental apartments for moderate and middle-incomes. "It is said that Manhattan has been moving in that direction for some time, but I would rather not push it." Not only was this unrealistic but it was also "historically dangerous."

In taking issue with the Planning Commission's majority report, Commissioner Beverly Moss Spatt detailed her objections in an 11 page statement:

> The Indians sold Manhattan Island for $24. The New York City Planning Commission is selling Manhattan Island for only $15.30¢ per sq. ft. Anyway it's put, it is selling zoning -- unconstitutionally, unethically, improperly. The selling of zoning opens a Pandora's box. It sets a serious precedent and bodes ill for the future. At another time, another administration, it might very well lead to corruption. Each building in the area will have to seek a separate permit which may or may not result in the granting of R10. This is spot zoning. The sale of zoning restrictions on densities has many attractions for those whose job it is to save the City money. If the restrictions can be sold to get sites for low income housing, why not for any number of other purposes for which the City finds itself short of funds, such as the building of public schools, health centers, hospitals, libraries, factories, etc. If this kind of thinking were to prevail, New York City might well become so overcrowded and congested as to become completely unliveable,

she warned.

> The City Planning Commission, in approving this zoning change, is doing the very thing warned against by the National Commission on Urban Problems.

She cited the Commission's report:

> Zoning often is used for opportunistic reasons. The city officials are persuaded to change not because the new zoning appears to produce the best land-use pattern for the future, but because they are anxious to improve the tax base.
>
> An aspect of land-use administration by lay bodies is that decisions which should be made on the basis of technical analysis are made instead through the political process.
>
> The warping of land-use regulations to help solve some public financial problems has been called Fiscal Zoning. In all such cases, the objective of land-use regulation to foster the best pattern of urban growth is subordinated to the cure of a fiscal ailment, and as a result, urban pattern suffers. And it can often be demonstrated that what seems to give an immediate financial advantage actually creates a financial disadvantage in the future.
>
> ("Problems of Zoning and Land-Use Regulations" Research Report No. 2 Washington D.C. 1968)

"Of all the agencies in the City government, it is surely the CPC that has the responsibility for taking a long range viewpoint," Commissioner Spatt remarked. In calling attention to the fact that the amendment would be offering a bonus of 300% for the inclusion of low and moderate-income housing in 15% of the units, she posed the question whether the underlying zoning designation was justified. "If the underlying or residential zone is suspect, the entire structure is built on shifting sand," she said, citing Daniel Mandelker:[52]

- If R10 controls are adequate for the provision of open space and protection against congestion when 15% or more of the units are for low and moderate-income families, why must a

developer who does not want to take advantage of the incentive, be restricted to a building just one-third the size and be required to provide open space at the ratio of 22 sq. ft. per 100 sq. ft. of floor area, or about 220 sq. ft. per family.

Spatt believed that the provisions of Section 86-071 and 86-072 which were to provide for an increase in the permitted residential floor area ratio, contingent in the case of 86-071, upon the inclusion in the development of at least 15% of the total residential floor area for low or moderate-income housing units and in the case of 86-072, upon payment of monies for public housing site acquisition, to be invalid because there would be a total lack of uniformity within the same district if some buildings were permitted an FAR of a R10 district, while others would be restricted to the residential floor area ratio permitted in a C6-1 district. This would violate the stipulation of the General City Law, Section 20 Subdivision 24, that regulations "shall be uniform for each class of buildings throughout any district." The difference in bulk and density, Spatt pointed out, was not justified by any zoning concept or purpose, but was rather based on the aim to provide more housing for a "limited and specified class," which "praiseworthy as this aim may be" was not a "purpose of zoning under our present laws."

Moreover, although the proper provision of housing for low and middle-income groups is a matter of public concern and "properly a matter of municipal action and interest," it has "nothing to do with zoning or with the purposes of zoning" and it is impermissible to use the zoning power so as to "accomplish the result which properly should be achieved by use of the general police power."

The Proposed Special Lower Third Avenue Development District constituted a significant departure from past zoning practice in two key ways:

- it restricted two blocks within the Special District to public housing. Commercial uses were accessary to public housing and public open space.
- It introduced the concept of recapture for value added by zoning action.

Robert Alpern, a zoning expert, in a discussion of the CPC's majority report (Cp 21179) asked the following questions with respect to the use restriction to Public Housing:[53]

- Can zoning properly be used for site selection for public improvements, when other site selection procedures are prescribed by law?
- Can zoning properly exclude all but a limited set of public programs from a site? What is the status of the site if public action to acquire it is not forthcoming within a reasonable time?

- In the present instance, is the Housing Authority, a state-created authority, independent of the City, in fact, committed to development of the site for public housing?

He pointed out that zoning action was not the authorized procedure for site selection for either housing projects or parks. One involved procedures prescribed by the Public Housing Law, the other City Map procedures prescribed by the City Charter:

> The restriction to a limited set of public programs -- unique in N.Y.C. zoning and quite possibly ultra vires the enabling legislation -- seems especially questionable where there is no hard assurance that action to initiate such programs will be taken.

In discussing the concept of recapturing value added by zoning actions as it applied to the Special District, Alpern asked whether the recapture options -- government assisted units, units at half rate, or contribution to the Public Housing site fund -- were comparable (i.e. equivalent in burden.)? What assumptions were made with respect to subsidized rents and apartment types under each option?

With regard to the Public Housing site acquisition contribution, the following questions were raised by him:

- What legal basis does the Planning Commission have for using a tax equalization rate different from the State rate to determine site value?
- What legal basis does the Planning Commission have for accepting a tender of money from a developer?

- What assurance is there that the earmarked sites will, in fact, be developed for public housing, and if they are not so developed, how will the Planning Commission enforce its recapture requirements?

Alpern concludes that the theory of the section seems to be that the service infrastructure and circulation facilities of the area in fact would support an FAR of 10 (or even 12) rather than & "as existing and notes that instead of simply remapping to R10 as in past practice, the Commission insists on recapture for the value added by the new floor area; in this case, recapture in the form of housing subsidy."

This prompts Alpern to ask a set of questions as to what city-wide implications pursuant of the recapture policy might have:

> City-wide, will recapture be City policy wherever simple remapping would have been used in the past? What other areas qualify for similar treatment?
>
> City-wide, will the added density permitted by recapture provisions (or, for that matter, by remapping) in fact be based on service, infrastructure and circulation adequacy, or will it be based on developers' profit requirements as determined by site construction and maintenance costs?
>
> What techniques will the Planning Commission use to determine adequate density support levels? What assumptions does the Commission make respecting developers' costs?
>
> What form will recapture take in other circumstances, e.g. where new housing is not appropriate?
>
> What economic assumptions will the Planning Commission use in determining a fair recapture burden?

But, on October 8, 1970, over the opposition of Mayor Lindsay, the Board of Estimate voted 18 to 4 against the Third Avenue plan. The four votes in favor were Mayor Lindsay's; the Mayor's stand-in Edward A. Morrison voted for the plan "as the only way to get low income housing built in this area."

Manhattan Borough President Percy E. Sutton, in voicing a suspicion held by the opponents that "the low income housing would never be built," cast his two votes against the plan.

City Council President Sanford D. Garelik voted against it "with a heavy heart." He said he doubted that the board's desire to spur low and middle-income housing would produce the quick results hoped for by others.

Controller Abraham D. Beame, who it was understood had agitated against the plan in executive session, objected to the provisions on which the rezoning was to be made contingent. Mr. Beame also called attention to the fact that no one except the City Planning Commission chairman, Donald H. Elliott, had appeared before the Board of Estimate in favor of the plan.[54]

Mr. Elliott, in expressing his disappointment at the Board's decision, described the plans as "an unprecedented opportunity to create new housing at a range of income levels in an area where land costs are high."[55]

This chapter views the remapping proposals for Lower Third Avenue, Second Avenue and the Avenue of the Americas as part of a deliberate strategy of regulating development, plotted at the inception of the 1960 code.

A bsic underlying tenet of residential investing building in Manhattan was a prerequisite precondition of potentially achievable high intensity-of-use differentials. A second precondition was the ability to secure superior environmental attributes.

The 1960 code was based on these tenets. The 1960 code may be viewed as the second part of a three-part strategy of managing the production and marketing of space to the advantage of an oligopoly of investment builders.

In the first part, the grace period, developers were encouraged to build high density buildings at locations where this would no longer be possible after expiration of the grace period because of elimination of achievable intensity-of-use differentials. Construction was stimulated where and/or when it otherwise was not likely to have occurred. The precondition of securing superior environmental attributes, light, air and outlook, plus averaged-out area densities that would not place an intolerable burden on services and the area wide infrastructure, was likewise to be expected after expiration of the grace period. The first part of the strategy had a most prodigious effect on the production of housing.

The mapping and bulk controls of the 1960 code constituted the second part of the ongoing strategy of housing production, by investment builders. It envisaged that both high intensity-of-use differentials and superior environmental attributes would be secured through the twin actions of mapping and bulk controls. The number of opportunities were limited, however, to protect and improve the space marketing position of the relatively small oligopoly of investment builders of high-rise elevator apartment buildings.

As the initial limited allocation of sites allowing high achievable intensity-of-use differentials allotted under the 1960 code -- limited, to a considerable extent, by space marketing considerations -- gradually became exhausted, the investment builders' strategy called for incremental remappings to higher densities. Such incremental remappings constituted the third part of the strategy of privately financed residential space production and marketing management.

The Third Avenue controversy needs to be evaluated in the contect of this three stage strategy. The Third Avenue experience demonstrates the vulnerability of the strategy. Although the Third Avenue remapping proposals were consonant with the model of the spatial environment promulgated by the 1960 code, namely of high-bulk spines flanking the avenues, there was considerable community opposition to such

remapping, based on concern over the impact on community and environmental values. Moreover, there was increasing public sentiment against the "windfall" values thought to be created through the public action of remapping to higher densities. The visibility of this issue tended to make it a priority issue.

A combination of factors, then, contributed to jeopardize the continued successful prosecution of the tripartite strategy of managing the marketing and production of residential space. Failure to gain remappings represents a breakdown of the strategy.

The proposed Third Avenue Special District was an attempt to overcome the impasse. With it, the line of demarcation between the concept of recapture of values created by public action, and the accepted externality concept, became increasingly ambiguous.

Chapter 13

The Lower Manhattan Experience and the Special Greenwich Street Development District

This chapter starts by reviewing the impact of the plaza bonus on the spatial environment of densely built up Lower Manhattan. The major portion of the chapter is devoted to an analysis of the process leading to Lower Manhattan's first Special District.

When Skidmore, Owings and Merrill designed the Chase Manhattan Building in the 1950s, they had no idea that they would be doing the adjoining building, the Marine Midland Building, at 140 Broadway, next to the Equitable Building, as well as the United States Steel Corporation's Building next to the Marine Midland, across Broadway:

- The Marine Midland Building squeezed out all possible bonuses.[1] Cedar Street that in the case of Chase, had been closed, was left open. However, its width of 45 feet was reduced from the point of view of the zoning lot to 35 feet. The additional ten feet were acquired by providing additional plaza space on the Broadway frontage. For every extra six feet of plaza depth provided on the Broadway frontage, 140 Broadway received one foot of encroachment upto a maximum of 10 feet (45 to 35). This provided an 80 foot deep plaza on the Broadway site. (Harry Helmsley was on both the boards of 120 Broadway and

140 Broadway.) In this manner, the 52 storey trapezoidal tower of 140 Broadway let a substantial part of 120 Broadway's Cedar Street frontage face onto a ground level plaza, thus enhancing that building's environmental attributes. In the summer of 1967, demolition began on the Singer Building and several others -- including the old 32 storey City Investing Building immediately to the south -- to make way for a 54 storey tower that United States Steel proposed to erect on the block bounded by Broadway and Church, Liberty and Cortland Streets.

On March 20, 1968, the Planning Commission approved a request by United States Steel that this block and the block to the south bounded by Liberty Street and Cedar Street, Church Street and Broadway be treated by the developers as one.[2] This arrangement resulted in plans to put up one large building with 1.8 million square feet of rentable floor space instead of two smaller buildings, one on each of the two blocks.

A landscaped park planned by U.S. Steel for the block south of the new building was to extend open space created by the plazas of the Marine Midland and Chase Manhattan towers to the east. To the west slightly off this axis were the giant Trade Center twin towers and plaza.

Under the zoning resolution, a building of about 1.3 million square feet could have been built on the northern site of 1 Liberty Plaza, with a second building of 500,000

sq. ft. on the park site to the south. A number of street widenings and closings were negotiated. Cedar Street and Liberty Street were widened. Temple Street, a narrow one-block alley connecting Cedar and Liberty Street that cut through the site of the projected park, was bought and closed.

For this consolidation of blocks, a special permit was needed. In addition, certain amendments to the zoning resolution were needed. In connection with the special permit an underground passage was called for. The CPC wanted a connection along Broadway because they felt that the Fulton Street Station complex should be tied together with the Wall Street Station complex. In this manner, it would have been possible to have gone underground from the Trade Center to those two stations. U.S. Steel, however, only agreed to a limited concourse which followed the path of least resistance around a truck dock and an L shaped space containing the vaults and the computers of the prime tenant, the stock brokerage firm of Merrill Lynch, Pierce, Fenner and Smith. There were no shops at the below grade level. In an earlier scheme, the passage was lined with shops on both sides. But U.S. Steel took the attitude:[3]

> You show us how it will make money, then we are interested. If it does not, we are not interested.

SOM staff members said that this was the first such

example of negotiations between a client and the CPC and that it was felt the city was still inexperienced in that they were asking for too much. But the cooperation between the city and U.S. Steel, which made the visual and traffic links possible, was lauded by Richard H. Buford, the Planning Commission's executive director, as a "great planning achievement."[4]

In 1969, the Downtown Lower Manhattan Association had said:

> Never has the case been more compelling for increasing the capacity of the overstrained subway facilities serving lower Manhattan than when Lower Manhattan faces a big increase in working population.

Downtown Manhattan is flanked by the congested Brooklyn and Midtown portions of the subway system, through which all subways to and from downtown must pass. Other factors critically affecting subway access to Lower Manhattan were critically overloaded subway stations with insufficient entrances, too little platform space, too short or too narrow platforms, too few turnstiles or inadequate staircases.

The Office of Lower Manhattan Planning and Development held that only the Bowling Green Station's capacity was limited by inadequate platform size and that the capacity of the six stations in the district was limited, not by platform size, but by inadequate access to the stations.[5]

> What is going to be done to get the additional thousands of workers to and from the New York Trade Center?

was the question asked in a letter to the Wall Street Journal.[6]

> ...I wonder if there would have been a trade center if planners had ever tried to get to the Wall Street area via the IRT Lexington Avenue line at 8.30 in the morning, or had tried to take a walk at lunch time around Nassau Street, or had tried to grab a "quick" bite at any of the overcrowded overpriced luncheonettes in the area?

The letter's writer viewed the Trade Center:

> ...as a gargantuan monument to the single minded devotion of landowners and builders to their "return on investment" at the expense of such human "amenities" as adequate transportation, adequate walking space, adequate lunching space, adequate breathing space... Why is people planning always after the fact?

- At 55 Water Street, closings enabled the consolidation of a four block site to make possible the construction of the world's largest privately owned office building. The Uris building provides 3.2 million square feet of rentable space, in a 56 storey tower and 15 storey wing that borders on a one-acre plaza, raised 30 feet above street level and accessible to the public by means of an escalator.

By raising the plaza and through the street closings, in this manner it became possible to provide a considerable percentage of the development's rentable office space on very large contiguous floors. In Lower Manhattan, there was a premium on such extremely large contiguous floor areas. How desirable to developers the concept of the raised plaza with valuable rentable area beneath it was, had already been

demonstrated in the case of the Chase Manhattan Building. The design for the Uris Building also necessitated relocating Jeannette Park, a delightful vest pocket park.

Pulitzer Prize winning critic A. L. Huxtable comments on the scene as follows:[7]

> Community waterfront uses? Parks and plazas united in open space planning? Human amenities? Urban esthetics? Municipal sense? Public good? None of it balances against private profit. And so the city closed the streets and handed them over to the developers, moved Jeannette Park and widened Water Street, all in the most pragmatic way possible.

(Singing the Downtown Blues)

- Rising along the Hudson is the 16 acre complex of the Port of New York Authority's World Trade Center. Bounded on the north and south by Vesey and Liberty Streets and on the east and west by Church and West Streets, it will be the largest commercial superblock in Manhattan, made possible by the closing of all internal streets of fifteen small blocks.

In 1960, it had been felt that the subways were too congested and that it was necessary to "put a lid on."[8]

> Therefore, if a FAR 15 existed then that area was made a FAR 15. Boundaries were very tightly drawn. A FAR of 10 was thought to be the top reasonable FAR designation to be allowed,

said Millard Humstone who, as a key planner with the Department of City Planning, had been involved in the studies leading to the Comprehensive Zoning Amendment.

However, this was arrived at without a scientific basis. Now any FAR 10 area is looked upon as a golden opportunity for negotiation.

In early 1970, the Office of Lower Manhattan Planning and Development was approached by the Fisher Brothers. They wanted to build an office building immediately to the south of the World Trade Center with an FAR of 18.[9] Their site, one block to the west of the succession of spaces and major new office buildings that, by virtue of the fact that they had all been designed by the office of Skidmore, Owings and Merrill, had come to be known as Skid Row, was located in a FAR 10 district.

The scale of the Fisher Brothers requests was unprecedented. Having assembled two complete blocks, Fisher Brothers needed their consolidation as a prerequisite for development. They were, then, petitioning the city not only to increase the allowed density but also to close and sell a portion of Cedar Street to provide a zoning lot of 65,882 sq. ft. Not only were they asking for 400,000 additional square feet of floor space, but also for dispensation from the tower coverage regulations to allow greater tower coverage.

The city had already fashioned a modus operandi for dealing with such situations, namely the Special District device. In the case of Lower Manhattan West, as the proposed Special District was initially referred to, the City sought to avert some of the criticisms that had been encountered in previous

Special Districts. In effect the Office of Lower Manhattan Planning and Development -- now under Richard Weinstein (Buford had left to take a post with Uris) -- sought to devise a Special District framework which would enhance predictability, eliminate extended negotiations, make it unnecessary for the Board of Estimate to pass on each individual project, introduce a degree of responsiveness toward changing market conditions, help achieve implementation of a detailed comprehensive plan for the area.

Plans were developed for a second level walkway linking 10 buildings with a shopping mall, stretching southwards from the World Trade Center along Greenwich Street. The Fisher Brothers Banker's Trust Development to be connected by a bridge to the Trade Center was to be the northern anchor of the walkway.

In July 1970, OLMPD was considering downzoning that part of the Special District, the major part, in which the base level was 15 to one of 10; and stripping away the as-of-right bonuses for plazas and arcades.[10]

A subsequent increase in the FAR from 10 to 18 was to be paid for (1) in the form of cash to a fund earmarked for circulation and/or subway improvements in the area, and (2) by specified built features. The money raised in this manner was to be deposited in a transit authority fund for Units of Transit Improvement. If the money deposited in the

transit authority fund had not been spent within a 10 year period, it was to go back to the developer.

> The Transit Authority is like a principality and so an urgent question to be solved is how do you work out a modus operandi with the TA? We plan to map the improvements that are to be made first, in order that we mzy know that the money is spent in the district. Otherwise, the TA might spend it elsewhere. We only have indirect control but nobody is going to turn down free money. 11

At the suggestion of developers, in order to (1) avoid discretionary negotiations, (2) eliminate the uncertainty created by incentive bonuses and (3) allow a more equitable evaluation, a formula was arrived at that took the following factors into account:

- Assessed land values from the tip of Manhattan Island to Canal Street;
- sales prices of respective properties.

It worked in the following manner. The average assessed valuations were multiplied by an adjustment factor gauged to the area in which the development was situated. The adjustment factor was geared to give a projection of the market value of the site following its redevelopment. The product was then to be divided by

18 (in an area with a base FAR of 15 + 3 for bonus) or

12 (in an area with a base FAR of 10 + 2)

The resulting quotient was the contribution rate per sq. ft. of bonus floor area. In this manner, then, the Fisher Brothers

would have been abke to acquire for the sum of $100,000, or 1 unit of Transit Improvement, 12,500 sq. ft. of additional space. At one stage of the process, it was intended that the Fisher Brothers acquire 5 such UTIs, i.e. for the sum of $500,000, they would have acquired 62,500 sq. ft. of additional space.

As it was very difficult to assume the rents being charged -- for instance, in the Theater District negotiations between developers and the city had tended to become "a guessing game" -- mapping of various districts with specific factors that took assessed values into account was considered superior because it was "at least grounded in something you could objectify."[12] But by the first week of August 1970, the Unit of Transit Improvement was "out of the window."[13]

Norman Marcus, the legal counsel to the Planning Commission, had been skeptical about tying subway improvement funds to the Transit Authority. It was felt that court challenges might result if it was sought to arrive at the market value by multiplication of assessed valuations by such an adjustment factor. And it was felt that establishing an uniform dollar contribution per unit of floor area applicable to all sites within the proposed special purpose district, was the more appropriate course to take. The scheme would not have required a plan and developers would not have been bound to specific requirements in the design of their buildings.

Also, because of the concept of externalities, cash contributions would need to be clearly connected to specific built features, which would warrant increased FAR and concomitantly increased building populations by improving circulation facilities used by their occupants. Lowering the base would have raised legal questions as to whether a drastically lowered base was arbitrary or not. Assisting the Office of Lower Manhattan Development in its study of Lower Manhattan West was the office of Haines, Lundberg and Waehler, formerly Voorhees, Walker, Smith and Smith, the firm that, in the late '50s, had been retained by the CPC to prepare a proposal for the Comprehensive Zoning Amendment. The firm had a consultant contract with the CPC to study special districts in N.Y.C.

By December 1970, the Office of Lower Manhattan Development had formulated its district plan for the Special Greenwich Street Development District. After approval by the CPC and the Board of Estimate in January 1971, the Fisher Brothers were able to go ahead with their 40 storey $36 million office building.

The Special District was "designed to promote and protect public health, safety, general welfare and amenity."[14] Specifically these goals included the following purposes:

- To foster and promote the orderly expansion of commercial office development;
- to encourage the development of a desirable working environ-

ment;

- to improve the rapid transit facilities in the area and pedestrian access thereto, including the provision of subsurface pedestrian access thereto, including the provision of subsurface pedestrian connections from centers of major commercial development to the transit facilities;
- to develop and implement a plan for improved pedestrian and vehicular circulation, including the grade separation of pedestrian and vehicular circulation systems;
- to retain and promote the establishment of a variety of retail consumer and service businesses;
- to provide an incentive for development in a manner consistent with the foregoing objectives, which were integral elements of the Comprehensive Plan of the City of New York;
- to encourage a desirable urban design relationship between each building in the district, between the buildings and the district's circulation systems and between the development in the district and in the adjacent areas of Battery Park City and the World Trade Center;
- to provide the most desirable use of land.

The two underlying base densities within the district were retained at 10 and 15, but throughout the district, achievable maximum densities were set at FAR 18. This, of course, provided those sites, e.g. the Fisher Brothers site, that had an underlying zoning classification of 10 with the

possibility of achieving a particularly high intensity-of-use differential. It was found that in addition to FAR increases, raising rental incomes, developers placed increasing value on relaxation of the tower coverage requirements.[15] For instance, a developer could save 5 million dollars if, instead of adhering to the zoning resolution's text calling for 40% site coverage, he could provide 50% site coverage, thus reducing the amount of floors to be built, in consequence, reducing windbracing, shortening construction time. With the building completed 6 weeks sooner, rental income would be greater and insurance would be less.[16]

Concomitantly, less exterior expensive-to-build - building surface would be required to enclose an equivalent amount of space, thus construction costs would be further reduced and maintenance costs would be cut.

The prevailing view in the Office of Lower Manhattan Development was that larger coverage towers could be accepted if the development was coordinated with adjacent lots:

> We are exploring the possibility of granting that privilege. There is only one major disadvantage, and that is that they cast more shadow. The streets of Florence are more oppressive than in New York because they are narrower in proportion to their height. The old City Beautiful concept is anchored in the zoning resolution and we are glad that it is there, because it gives us more leverage. We are getting a year round protected environment, open to the public. As half the year, you would prefer to be inside anyway, we are glad to trade off 3/4 mile of covered environment for light and air. It is worth it. However, if you had random development and on top of it, increased

> coverage, you would be crazy. If all you are losing is some bulk, it is a small price to pay. [17]

But Millard Humstone had a less optimistic view. In calling attention to the fact that Fisher Brothers had first called for a coverage increase from the allowed 40% to 44%, then to 49%, then to 52% and finally to 55%, he claimed that, in this manner, the principle of light and air was being chipped away.[18] He said:

> Just think of the neighboring parcel, if an 18 FAR tower building is built with a coverage of 55%, with no modifications of height and set-back! The detrimental environmental aspects will be compounded, if the developer of the adjacent site, in the name of equity, also demands the privilege to develop at 18 FAR and instead of the 40% coverage, also desires 55% lot coverage.

Despite such reservations, a formula was included in the Special District Text which allowed conversion of excess bonus floor area into tower coverage. Under the formula, the maximum percent of lot area which may be occupied by a tower shall be the sum of 40% plus one-half of one percent for every .1 by which the floor area for such development would exceed floor area ratio 18. I. e. for each 0.2 points of allowable FAR which remained unbuilt, the tower coverage might be increased by one percentage point. The maximum allowed tower coverage on a zoning lot was not to exceed 55%. This represented a 15% increase over previously allowed tower coverage. By availing himself of the conversion formula, the developer might provide additional amenities worth 3.6

points of FAR. Without such a conversion formula, the achievable maximum FAR would have been 216, i.e. more than double the base level.

In addition to allowing for increased density and increased coverage, the city could exert leverage in a third area, namely in the closing, demapping and sale of streets. This device was resorted to particularly in Lower Manhattan.

Louise Huxtable commented in Singing the Downtown Blues:

> In Lower Manhattan, historic streets have been damapped and eliminated by the City Planning Commission to make profitable superblock parcels for private builders. 19

In the Critical Issues Volume of New York City's Master Plan (page 23), street closings are listed, along with remapping height and setback variations, the power of condemnation for unassisted urban renewal, as tools "whose potential for shaping development the City had only recently begun to exploit...Each of these tools can have a strong effect on the profitability of a piece of land."

Almost without exception, street closings were a prerequisite to Lower Manhattan's major new office structures:

- The consolidation of blocks 54 north and 54 south involved closing and selling of yet another portion of Cedar Street. The resulting block 54 has a lot area of 65,882 sq. ft. In return for the closing and as a condition of sale, Fisher Brothers agreed to provide a through block arcade

approximately along the alignment of the closed portion of Cedar Street between Greenwich and Washington Streets.

- Inclusion of the street portion in the zoning lot,
- joining of the two separated blocks,
- and waiving of the until then applicable 40% coverage limitation for tower coverage,

made it possible to provide floor sizes of approximately 36,250 sq. ft. Had the 40% coverage rule still been applicable, then floor sizes would have been at 26,350 sq. ft., approximately 10,000 sq. ft. smaller.

Large floors were more in line with perceived space marketing needs. Moreover, three such large floors could contain as much space as four smaller ones.

As already stated, the Special District contains land zoned previcusly either at FAR 10 or 15. The zoning overlay does not alter these basic densities. Rather, it provides a schedule of FAR bonuses which developers may earn to bring their maximum FAR in any part of the district to FAR 18. The schedule worked in the following manner:[20]

- For any development in that portion of the District superimposed upon a C6-4 District, e.g. the Fisher Building, the basic maximum floor area ratio might be raised from 10.0 to

15.00 by means of additional floor area allowances for provision of pedestrian circulation improvements or for money contributions in lieu thereof.

- A basic maximum floor area ratio increased in this manner was to be referred to as the adjusted basic maximum floor area ratio.

In order for the Fisher Building to achieve the adjusted basic maximum floor area ratio of 15, the Fishers had to refer to the block descriptions in Appendix B of the zoning text. Heading the list of Mandatory Pedestrian Circulation Improvements for Block 54 N was PCI:B

> An open pedestrian bridge spanning Liberty Street between the north lot line, near its middle of block 54 N and the World Trade Center plaza and the elevated public pedestrian circulation system required in block 54 N.

With a bonus rate of 100 sq. ft. per linear foot, the 160 foot long bridge contributed a floor area allowance of 16,500 ft. There were three other Mandatory Pedestrian Circulation Improvements listed:

- An open pedestrian bridge spanning Greenwich Street to provide pedestrian access between the elevated public pedestrian circulation system of Block 52 N and 54 N. However, the bridge was not required if block 52 N had not been redeveloped to provide the pedestrian connection.
- An open pedestrian bridge spanning Washington Street, to connect the elevated public pedestrian circulation

systems required in Block 56 N and 54 N. However, this bridge too, was not required if Block 56 N had not been redeveloped to provide the pedestrian connection.

- With the closing of Cedar Street, an elevated shopping bridge spanning Cedar Street and connecting blocks 54 N and 54 S was obviated.

Fisher Brothers, after having selected the only applicable Mandatory Pedestrian Circulation Improvement, the bridge earning 65,000 sq. ft., were still 312,910 sq. ft. short of the total of 377,910 sq. ft. needed to reach the adjusted basic maximum FAR of 15. Therefore, it became necessary to get further density for Fisher Brothers to select elective pedestrian circulation improvements in the order in which they were listed in Appendix C of the district's regulations.

As opposed to Mandatory Circulation Improvements which must be built on the designated lot, Elective Pedestrian Circulation Improvements are, in the rule, separated from the lot. The list of Elective Pedestrian Circulation Improvements contained nine PCIs.[21] The first four of these were pedestrian tunnels, improving access patterns to the Lexington IRT Fulton Street and Wall Street Stations. PCI 5 through 7 provided for modernization of the entrance and control areas of the Lex IRT Wall Street Station, escalators and stairs, while PCI 8 was concerned with improving the Broadway BMT Rector Street Station.

Heading the list was a Pedestrian Tunnel under Church Street between Block 62 and the World Trade Center. Block 62 was the site of the United States Steel Corporation's building at 1 Liberty Plaza. The tunnel was located at the north westerly corner of the block and was thus a considerable distance to the north east of the Fisher building. With PCI 1 earning the Fishers a space increment of 303,500 sq. ft., they were still short of 9,410 sq. ft. to achieve an FAR of 15, the adjusted base level.

At this point, a second important and innovative element of the Special District, namely the Greenwich Street Development District Fund, comes into play.[22] By making a cash contribution to the fund at a rate of $6.75 per sq. ft., the developers were able to make up the difference needed to achieve the adjusted basic maximum. The cash contribution was the number of sq. ft. (9,410) multiplied by the monetary rate ($6.75) which equaled $63,517.50. The District Fund was to be established by the CPC, the Transit Authority and the Comptroller. Monies levied by it were to be devoted solely toward the improvement of public transit facilities within the District in accordance with a Transit Improvement Program prepared by the New York City Transit Authority and approved by the CPC. Such Transit Improvement program, the preparation of which may be financed by the fund, was to set forth "a coordinated series of improvements and a renovation

design." Specifically identified were the following kinds of improvements:

- lighting
- painting or resurfacing of the walls, floors and ceilings,
- the modernization of turnstiles, mechanical exits and change booths,
- graphic design and replacement of signs.

By comparison with earlier plans, the District Fund appeared to have been greatly watered down. It had been assigned a relatively humble role.

It is interesting to note that no pretense was made to establish any kind of connection between the impact of increased densities of individual projects and amelioration of those impacts through deployment of the district funds to that end. The kind of improvements listed fall, with the arguable exception of the modernization of turnstiles, mechanical exits and change booths, all within the province of maintenance, normally and rightfully an obligation of the Transit Authority. It will be recalled that Norman Marcus, legal counsel to the CPC, had been skeptical of the proposition of tying subway fund contributions to the TA. Nonetheless, the kind of improvements envisaged were not abandoned. The problem had largely been successfully circumnavigated by introduction of the Elective Pedestrian Circulation Improvements, off-site subway related improvements for which individual participating

developers themselves were directly responsible. However, as Millard Humstone has pointed out:[23]

> Improving pedestrian circulation is not necessarily going to reduce congestion, which is also a factor of the number of trains the station can serve in a given period of time. Any amount of escalators and additional entrances and underground concourses will not necessarily solve the problem.

It was determined that 1 sq. ft. of additional rentable space was worth $6.75. In determining this value, the following factors were taken into account:[24]

- With an 80% efficiency factor (net to gross sq. ft.) and a 10% vacancy factor, the net rentable area amounts to 72%
- With New York City construction costs ranging between $40 - 45 per gross sq. ft., or an average of $42.50, dividing by the net rentable to gross area figure of 72% cost per net rentable sq. ft. is $59.25.
- The yearly net rental of 1 sq. ft. of space is net rental less operating expense: ($10 per sq. ft. less 34% or $3.40) $6.60. Capitalized value at 10% capitalization rate is $66.00 per sq. ft.
- To arrive at the value of a net rentable sq. ft., a net net sq. ft. is capitalized and the construction cost per net rentable sq. ft. deducted.

The capitalized value of a net net rentable sq. ft.		$66.00
Less Building Cost of a net rentable sq. ft.	-	59.25
Value of an incremental net rentable sq. ft. of space	=	$ 6.75

We have then, in fact, a surrogate currency substituting for legal tender. The cost of desired features is translated into bonus increments in floor area by dividing the cost of each individual feature by the values of an incremental net rentable square footage of space.

We may then deduce the cost that the Office of Lower Manhattan Development anticipated for each feature entitled to a floor area allowance by multiplying the specified award rate by $6.75:

Floor Area Allowance for Mandatory Pedestrian Circulation Improvements

	per lin. sq. ft.	cost per lin. foot
a) for an elevated shopping bridge	700	$ 4,725
b) for an enclosed pedestrian bridge	270	$ 1,791.50
c) for an open pedestrian bridge		
(1) single span	90	$ 607.50
(2) multiple span	100	$ 675
(3) with stair or ramp	120	$ 810

Conversely, if for instance the cost of one pair of 32 inch escalators straight run is in the vicinity of $140,000, the floor area allowance will be set at 20,000 sq. ft. which is $140,000 divided by $6.75.

It is of significance that, whereas the floor area allowances for Mandatory Pedestrian Circulation Improvements, Elective Pedestrian Circulation Improvements and Lot Improvements were immutably codified, provisions were made for annual adjustments to the fund contribution rate. On July 1, 1971, and on each subsequent July 1, the CPC was to publish the monetary rate at which additional floor area was to be credited for the forthcoming year.[25] Such rate was to be arrived at by multiplying the monetary rate for the previous year by a fraction, the numerator of which was to be the land assessed value for the fiscal year, beginning on July 1, and the denominater of which was to be the land value for the fiscal year having just ended. The term "land assessed value" was defined as the sum of the:

> values of real estate unimproved by those zoning lots upon which are constructed the thirty most recently completed privately owned office building, having at least 100,000 sq. ft. of floor area and located south of Chambers Street in the Borough of Manhattan. The contribution, if tendered prior to July 1, 1971, shall be at the rate of $6.75 per sq. ft.

At this point, two observations are in order:

- Although two different ways were used to arrive at the value of an incremental square foot, the rates were, in both cases, the same.
- Applying the recomputation formula one finds that the contribution rate would increase to $6.95 if the "land

assessed value" increased by 3% in one year. In this manner then, if the cost of providing amenities were to remain constant, there would be at one and the same time, two different values for the incremental rentable square foot.

Fisher Brothers were compelled to make a cash contribution to the fund because it was necessary to exactly achieve the adjusted basic maximum FAR of 15, before proceeding to get further bonuses under C5-5 regulations where the base already was at 15. Although there were additional mandatory improvements listed for Block 54, all of these would have exceeded FAR 15 if added to the already achieved density.

With the Fisher Brothers having achieved the adjusted basic maximum floor area ratio of 15, they became eligible for the bonus rates established in the regulations of the C5-5 district. However, this option was qualified in that first any mandatory Pedestrian Circulation Improvements and mandatory Lot Improvements designated for the site by the District Plan had to be constructed. Once the adjusted basic maximum FAR had been achieved in this manner, they had to again proceed in accordance with the specifications of Appendix B - Description of Improvements by Block.[26] Next on the list were the lot improvements. There are three types of lot improvements:

- mandatory
- preferred
- discretionary

First, Fisher provided the required mandatory lot improvements:

- A shopping arcade approximately 100 ft. in length producing a floor area bonus of 10,000 sq. ft. bonusable at a rate of 100 sq. ft. per linear foot of arcade.
- A shopping way producing a floor area bonus of 74,000 sq. ft. bonusable at a rate of 400 sq. ft. per linear foot.
- Escalators to a second floor lobby bonusable at a rate of 30,000 sq. ft.

This added up to 114,000 sq. ft.

Then they turned to the preferred lot improvements:

- By building an elevated plaza designated as a preferred lot improvement, they were also able to fulfill the requirements for a mandatory pedestrian connection. At 10 sq. ft. of space for each sq. ft. of plaza, they earned 200,000 sq.ft.
- 16 trees at 300 sq. ft. per tree produced 4,800 sq. ft.

The cumulative total of earned space was now 318,000 sq. ft. Of this, 171,293 sq. ft. FAR (2.6) was converted into increased tower coverage of 53% leaving a FAR of 17.4. With 0.6 points short of a total FAR of 18, two discretionary improvements were availed of:

- An arcade along Liberty Street,
- And a plaza on Washington Street.

As conditions to the issuance by the Department of Buildings of an excavation permit for development of a zoning lot in a block containing any mandatory or preferred lot improvement, mandatory pedestrian circulation improvement:

- the developer was to submit to the Chairman of the CPC
  (a) written notice of its intention to develop a zoning lot, or portion thereof, in the District, the floor area of such intended development, and the lot and pedestrian circulation improvement, if any, which the developer was to construct, or, alternately have a private party or a public agency construct on its behalf;
  (b) plans and outline specifications for such improvements;
  (c) an agreement regarding those pedestrian circulation improvements to be constructed by a private party or a public agency, obligating a private party or a public agency to construct such pedestrian circulation improvements reasonably coincident with the construction of the development.
- Upon receipt of the necessary documents, the Chairman of the CPC was to certify to the Department of Buildings, the developer's compliance with the District Plan.

Where a developer is required to have a private party or a public agency construct an elective pedestrian circulation improvement on its behalf (the "third party improvement") and the developer is unable to enter into an agreement with such

private party or public agency which is satisfactory to the Chairman of the CPC, the Chairman may allow the developer to select the next highest ranked unconstructed improvement in lieu of the third party improvement.

On application, the CPC may grant special authorization for minor modifications upon a developer's showing of compelling necessity.

Fisher Brothers applied for a number of such special authorizations.[27] They requested that the pedestrian bridge between the World Trade Center and their building be allowed an average width of 12½ feet, rather than a continuous width of 15 feet, so as to allow for a ten foot wide link at the World Trade Center's end of the bridge, a stipulation demanded by the World Trade Center's architects; the shopping way to be set back somewhat less than four feet from the front line along Greenwich Street to allow a projection of the building's columns; reductions in the width of the shopping arcade; shortening of the shopping way; counting of an outdoor cafe on the elevated plaza towards the 2.5% retail requirement, and doors at the foot of the escalators at the southeast corner of the building for reasons of security, maintenance, protection against inclement weather, and efficient climate control. The latter request was rejected on the grounds that a sense of unrestricted public access was essential, and that doors, even if of glass, would create a psychological barrier.

Inclusion of the outdoor cafe was made subject to provision of two serving kiosks, at least twelve tables with four chairs each and overhead protection. In the course of the process, the possibility of granting bonuses to encourage specific uses was contemplated. This device was to be a feature of the Fifth Avenue Special District. Such provisions were, however, omitted. It was felt by the staff and rental agents that the working population and the anticipated pedestrian population would be sufficient to economically support a minimum of 2½ % of the total floor area of any development in the District allocated to retail or service uses without additional stimuli.[28]

The frontage on a shopping arcade or an elevated shopping way was regulated to prevent:

- an aggregate linear dimension of all frontage occupied by airline offices, banks, loan offices or security brokerage offices, exceeding 25% of the front lot line of the zoning lot;
- any such individual establishment occupying more than 40 ft. of frontage;
- any grouping of such establishments occupying more than 80 feet of frontage;
- depths of store space less than 15 feet.

These stipulations were considered necessary to:

- protect needed and district-enhacing retail uses and services from competition from such uses as the aforementioned, which
  (a) generally could afford higher rentals,
  (b) afforded a building greater prestige,
  (c) in the view of many developers, created less problems;
- to prevent dead spots in the pattern of retail usage
- and maintain retail continuity.

They were a response to the experience met with in the redevelopment of Third Avenue, Fifth Avenue, the Avenue of the Americas (6th Avenue) and other areas of the CBD in which uses and services vital to an area's effective functioning had been displaced or excluded or in which retail continuity had been interrupted.

Projects that can be reasonably expected in the next 10 years could result in about 132,000 persons working in the area, Richard Weinstein estimated in 1970. About 70,000 work there now, he said, and about 116,000 could work there if the present zoning was used to full development. Mr. Weinstein said that $10 million to $15 million worth of circulation improvements could be added along with the increase in the population.[29]

> I'd say we'd begin to feel the impact within 5 years, and there would be quite a few developments within 15 years.

If builders were to exercise all options, what would emerge would be a separation of pedestrian and vehicular traffic, control of parking and loading and a two level retail "spine" down Greenwich Street from Liberty Street to the Battery.

A number of obstacles stood in the way of achievement of the Special District's avowed long range design objectives. Realization of the area plan was dependent on completion of a majority of its constituent elements. The plan did not lend itself to piecemeal incremental fulfillment. Even if most of its developments were completed, just one missing link could prevent the second level walkway system, the key element of the scheme, from being used. Thus, great additional densities would have been built up and the district's working population substantially increased, without the circulation improvement needed to handle the additional population, upon which those densities were to be contingent, being available. It was unlikely, as Richard Weinstein himself indicated, when he said he expected "quite a few developments within 15 years," that the scheme would be completed within a short time horizon or, alternately, that a reasonable number of its onstituent elements could be completed to make it operational. Indeed, both Marvin Markus of the Citizens Housing and Planning Council of New York and John Pettit West III, one of the key staff

planners of the Office of Lower Manhattan, anticipate major redevelopment occurring over a period of 10 to 30 years, although they expected New York's recent glut of office space to slow the process.[30] In addition, many buildings within the district were commodious and even in spite of the readjusted densities, the achievable intensity-of-use differential was not a sufficient inducement to redevelop. Although detailed specifications had been worked out on a block by block basis, presupposing development in increments of city blocks, ownership patterns still reflected considerable parcelization within individual blocks.

In face of its being less than likely that precipitate area redevelopment would occur, the question needs to be asked to what extent did the scheme lend itself to disaggreegation into useful subunits?

Here the following factors need to be considered:

- Can a development occurring at a random location within the district under the provisions of the district, relate to and interface with both (1) existing, abutting buildings that may continue to exist for a long period, as well as (2) to other new structures, under the provisions of the district, replacing existing development?
- Can the district legislation adequately cope with the various levels of specificity involved, i.e. both at the area-wide scale and at the building scale? Can all

contingencies of the intricate and complex process of designing a major building be anticipated?

Were it possible to stage development sequentially -- to anticipate which sites would be developed and in what order -- it might indeed be possible to legislate certain features on a building by building basis that, upon completion of a sub-group of buildings, would result in a useful amenity benefiting all of the buildings of the subgroup. That amenity in turn could then be related to an amenity of another stage of the district's development, which, too, has an independently functioning amenity, spread over a number of developments. In this manner then, the cohesive system of amenities would gradually fall into place. However, in most cases given the kinds of constraints and indeterminants outlined, this will not be a viable approach. Therefore, each increment of development, as it occurs, randomly and disjointedly over time, should be of value, in its own right, to both its immediate surroundings, whether these are also undergoing change or not, as well as to the area at large.

Must we then conclude that the Special Greenwich Street Development District has either been a failure or is alternately doomed to fail? If we are to measure success in terms of successful implementation of long-range plans for a complicated design and complex physical framework, the avowed objective of the legislation, then the answer would probably

have to be in the affirmative.

I suggest, however, that the key participants in the process tended to measure success in different terms. The underlying and unavowed objectives of the undertaking were surely inspired by the following kinds of factors:

- Fisher Brothers desire to substantially and unprecedentedly enhance the potentially achievable intensity-of-use differential of a prime piece of property just to the south of the World Trade Center.
- The climate toward zoning and mapping changes was growing increasingly unfavorable. (The Manhattan member of the Board of Estimate had voted against several Special Permits to be granted under the Special Theater District's designation, one even pertaining to a Fisher Brothers project, on the grounds that too much had already been done for the big builders.)
- Simplistic tailoring of the zoning text to fit individual sites was becoming too transparent.
- It was necessary to do something to ward off allegations of favoritism, resulting from granting of Special Permits on a discretionary basis and based on vague criteria of the Special Districts.
- It was felt necessary to avoid bringing in the Board of Estimate to pass on individual projects of Special Districts which might have voted against the project.

From the point of view of the Fisher Brothers, the legislation as enacted had several advantages:

- It substantially enhanced the achievable intensity-of-use differential of the site without their having to go before the Board of Estimate, which was necessary in the case of the other Special Districts or otherwise having to negotiate for a Special Permit.
- With theirs, the district-initiating development, they were nevertheless able to participate in an interactive design process with respect to what was required of their development. The potential dangers faced by subsequent projects inherent in legislating complex architectural designs could in consequence, to a considerable extent, be averted.

Many of the built features, in exchange for which Fisher Brothers received additional rentable square feet, were themselves of considerable value to the Fishers.

Given immutable codification of award rates and escalation of building costs, costs of built features to be provided could be more accurately gauged to prevailing building costs than in subsequent developments. Fisher Brothers were able to concentrate the bulk of their building in the southerly portion of the site. The building, with its increased coverage, rose vertically without setback from its lotlines. In this manner, a prestige-enhancing plaza facing the World Trade Center was made possible.

Draping the Special District cloak around the Fisher Building made it possible for the city to legitimize and achieve certain objectives that otherwise it could not have achieved unless it had expended capital funds. I am referring specifically to the provision of Elective Pedestrian Circulation Improvement #1, namely the pedestrian tunnel under Church Street between the World Trade Center and 1 Liberty Plaza, the United States Steel Corporation Building. This link was considered by the city to be vital. Its provision made possible the linking up of the network of concourses beneath the World Trade Center and tying into the Port Authority Trans Hudson tubes, with the underground pedestrian passage beneath 1 Liberty Plaza. In this manner, it became possible to connect the World Trade Center with the IRT station at Fulton Street and beneath Broadway to the east and the United States Steel Corporation's building with the PATH tubes to the west.

However, and this deserves to be stressed, the link constructed by the Fisher Brothers did not serve to shorten or enhance the walk of the occupants of the Bankers Trust Development to and from their nearest IRT subway station, which was the Wall Street station, 3 short blocks to the south of the Fulton Street IRT and one block due east of the Bankers Trust Development with an entrance at Cedar and Broadway.

In the case of the Fisher building, it would not have been possible to directly establish a clear connection between the increased densities and increased occupancy and the elective pedestrian circulation improvement because, as stated,
- the tunnel was a considerable distance to the north,
- it afforded no direct connection to block 54,
- the building's occupants would tend to use the nearest of the two IRT stations, and in so doing, would avoid the tunnel.

Draping the protective Special District cloak around the Fisher building and emphasizing the comprehensive district-wide plan aspects of the special legislation, provided the means with which to justify building the missing link in the East-West circulation system. I am arguing then that the main area of concern on the part of the city was not the implementation of a comprehensive area-wide plan, which admittedly the framework of the legislation tends to suggest, but rather a more limited one. Achievement of these limited objectives was considered in and of itself a satisfactory objective to pursue. The process was geared to achieve these more limited ends. The draping of the Special District cloak was a means to an end, rather than an end in itself.

Why was Liberty Street not adhered to as the northern boundary to the district between Church Street and Broadway? Why was a single block to the north bounded by Church Street to the west, Cortlandt Street to the north, Broadway to the

east and Liberty Street to the south, on which the United States Steel Building had already been erected, included as an appendage to the otherwise more or less rectangular district?

The experience suggests that this was primarily done so as to be able to legalize construction of the tunnel connecting the World Trade Center and the U.S. Steel Corporation building at the northern most corner of the block on which the U.S. Steel building was situated. There definitely was a need for such a below grade connection to serve pedestrians moving west from the Trade Center or west from Broadway and the U.S. Steel Building. However, at that location, no clear connection can be established between either the added densities of the Fisher Building, or the cumulative additional densities projected by the district to the south as a whole.

Why were award rates for to-be-built features immutably codified although it was expected that projects would be built over a long period of time? Of course, continued escalation of construction costs was a factor that had to be reckoned with, and at one and the same time, varying bids could be expected. There are a number of possible answers to this question. Of course, this could have been an oversight or an inadvertent omission. But I think this is not likely. Rather I submit the experience suggests this is

indicative of the nature of the process in which the focus of interest was on one particular problem at hand, a problem that, it was thought, could realistically be dealt with. Therefore a price was established for that feature that was actually to be built.

Other prices indicated an approximation of the prevailing construction costs in 1970. The principal purpose, I suggest, of inserting prices for other to-be-built features in the form of incremental square footage was to give the whole district construct an aura of comprehensiveness and credibility and to convey in a superficial way that everybody was being judged by similar standards. But how would one reconcile this preceding answer with the apparently so carefully worked out requirements for each specific block? A recent case study of various developmental alternatives possible under the district's provisions for two key sites revealed numerous glaring inconsistencies and shortcomings inherent in the text of the district as it applied to the two sites.

While great care was taken — in an interactive and ongoing process with much give and take -- in arriving at the appropriate developmental package for the Fisher Building. it was inherent in a process in which future clients had not even been identified and in which future contingencies could not be anticipated, that exact and

complex architectural specifications could not be forecast over varying periods of time, and mandated. At the same time, the district's text with its often contrived or unreasonable requirements or arbitrary features, including inconsistencies and ambiguities,[31] creates an environment in which the prospective developer's hands were bound to be tied in advance. The framers of the legislation rode on the coat-tails of the concept of the comprehensive plan that, in view of its generally recognized ineffectiveness, still commanded a surprisingly high degree of esteem among laymen, politicians and certain professionals, among whom it seemed as never before, to be regarded as good currency. It created, perhaps unwittingly, conditions that, rather than facilitating and speeding up the process of development -- their avowed purpose -- would, on the contrary, by virtue of the straight jacket they imposed, compel potential developers to again enter into negotiations with the city to seek changes, dispensations, relaxations, etc. from the district's stringent and narrowly defined specifications.

Richard Weinstein gives recognition to the problem in the following words:[32]

> There is, however, a built-in difficulty of reducing the amount of ambiguity and doing it by the book, which is based on the very nature of entrepreneurial endeavors. With too many design predilections and the creation of a straight jacket, there is a danger of losing in the process of granting permits, a certain amount of flexibility...

> There is tension between what you want to negotiate for and the zoning resolution...
>
> Next day, someone is going to come along with a different way of doing it, so there is always justification for a certain amount of latitude -- no negotiation, whatsoever, is possible either... We have not been so inventive in making it automatic as we have been in determining what should be done, therefore we have been going to the real estate community who can help us on this.

These statements were made in an interview with the writer in Summer, 1970.

Having argued that the Greenwich Street Special District was primarily conceived in order to meet the needs of the city and the Fisher Brothers with respect to block 54 N, rather than to secure implementation of long range complex design goals, it is in order to ask how well those needs were met? How did the city fare in the bargaining process? Did the resulting structure justify the alterations to the rules made to make the Fisher Brothers structure possible?

First, light and air. Required open space is reduced from 60% to 45% of the site on the grounds that this is acceptable if a coordinated plan is adhered to. By virtue of the fact that the remaining 45% of open space is concentrated on the northern portion of the site facing the low rise structures of the World Trade Center (the building rises vertically without any setback from three of its side lot lines, namely from Washington, Albany, Greenwich Streets, all of which are narrow streets), a number of consequences are generated

that, it would seem, are more advantageous to the developer than they are to the city. As Markus and West have correctly pointed out:[33]

> The streets of Lower Manhattan were designed to accommodate carriages and wagons and three or four storey buildings, rather than 40 to 60 storey buildings.

It would seem that given:

- the narrowness of the streets,
- the fact that there is an air-park over the low-rise portion and plaza of the trade center,
- the reduced amount of on site open space,
- and relaxation of setback requirements,

it would have made more sense, from the point of view of:

- minimizing adverse effects of increased coverage,
- supplying the densely built-up area to the south with sunlight, light, air and open space,
- providing possible future development to the south with light and air and open space,
- providing shelter from the winds of the Hudson and the up-winds of the Trade Center,

to have located the building's open space to the south of the site where it could have provided:

- a wind-sheltered and sunlit plaza, particularly valuable in the winter, rather than to the north, where it would be almost perpetually in shadow.

But Fisher Brothers insisted that the plaza be to the north of the building facing the Trade Center for reasons of prestige.

A questionable precedent is set in the relaxation of open space and setback requirements. By allowing buildings to rise vertically from lot lines of narrow streets, similar environmental conditions are created to those created by 120 Broadway, the Equitable Building, just two short blocks to the east, the reaction against which triggered the 1916 zoning resolution. Even if a coordinated plan can be achieved, I strongly doubt whether such trading-off of light and air against a climate controlled environment is justifiable, a belief which is reinforced by the experience of the Fisher Building. In view of the fact that such a plan is not likely to be implementable in short order, if at all, existing structures will be faced with seriously deteriorated environmental conditions when those new neighbors that are built rise perpendicularly from the lot line of narrow streets for 40 to 60 storeys, as does the Fisher Building.

Another area of concern is the fate of Cedar Street. It is the southernmost east-west street, i.e. the first street to span Broadway connecting the eastern and western parts of Lower Manhattan. All other cross streets below it terminate at Broadway. As such a cross street, it enjoys

special significance:

- it provides good east-west access;
- in conjunction with Liberty Street to the north, it could have served as the southern leg of a one-way pair of streets;
- with its closing, between Washington and Greenwich Street, and the erection of a 60 storey building in its bed, yet another terminal feature was created.

The World Trade Center had blocked off four more such streets between Broadway and the waterfront. These numerous terminal features blocked off the view of the patch of sky reaching to the horizon, just above the Hudson, a feature that tended to:

- alleviate the oppressiveness of the narrow streets in a high density environment,
- provide a sense of orientation and visual delight.

Moreover, Cedar Street's funnel of space, reaching across Lower Manhattan from the Hudson in the west to the east, had fulfilled an important micro-climatic function in that it facilitated circulation of air within the district.

Fisher provided bonusable features that allowed its building to be tied into the World Trade Center and participate in its amenities. It was, in effect, an extension of the beachhead created by the World Trade Center.

True, the city gained an important connection between two separate below grade pedestrian systems, but this did not, as has been demonstrated, ameliorate, to any significant extent, impacts of doubling densities on block 54. It was a feature for which provision should have been made, regardless of whether block 54 N or any of the other blocks in the Special District were redeveloped or not.

On January 18, 1971, a week after the Special Greenwich Street Development District was approved by the Board of Estimate, the Fisher Brothers' plan to erect a $36 million, 40 storey structure, to be connected by a footbridge to the World Trade Center, was announced at City Hall.[34]

The Times stressed the building's relationship to the World Trade Center in the article's heading, "Addition to Trade Center Planned." The new building was to be leased by the Bankers Trust Company as its main operations headquarters. The bank was to occupy only about 800,000 sq. ft. of the structure's 1,185,000 sq. ft. total and sublet the rest. Fisher Brothers were to contribute $2 million toward a $3,000,000 subway pedestrian tunnel connecting the U.S. Steel Building at Church and Liberty Streets, with the PATH subway system under the World Trade Center. The Port of New York authority, which was building the Trade Center, was to pay the $1 million balance of the tunnel's cost. The architects were the firms of Shreve, Lamb and Harmon Associates and

Peterson and Brickbauer. Competition was scheduled for 1973.

Also, within the confines of the district, developer Sylvan Lawrence is considering redevelopment of block 20 N between Broadway and Trinity Place south of Exchange Place.[35] To the south, the site abuts a windowless firewall of a pre-1916 office building. The site is presently developed at an average density of FAR 7. The Bank of Tokyo has been committed as the primary tenant. Law firms are expected to take the remaining space. Skidmore, Owings and Merrill were retained to prepare a scheme for the site. In charge are Gordon Bunshaft and Roger Radford. The scheme prepared by SOM, envisages a relatively slender and tall 34 storey building on the southerly portion of the site. Developer Sylvan Lawrence had identified, mainly among the many law firms in the area, a market for relatively small floors. The building's core element was to abut the windowless firewall which was to serve as an element separating the two building bulks. On the northern portion of the site it was proposed to provide a plaza, thus eliminating notoriously narrow Exchange Place. This would also create open space facing onto Lower Broadway. This would have been beneficial, from the standpoint of light and view, to occupants of buildings on the east side of Broadway. Lower Broadway, much narrower than the typical north-south avenue and, to a

considerable extent, built up before enactment of the 1916 resolution, was lined with buildings as much as three to four times higher than the width of the street. The proposed development package, it seems, would thus have made a substantial contribution to the rehabilitation of the quality of the environment in its vicinity.

In calling attention to the "significant urban wall" created by the "facades of a series of buildings, each rising to a height of twenty or thirty floors, without setback from the edge of the street," the framers of the legislation had mandated that certain developments, e.g. on Broadway, "conform to the established streetwall."

The Office of Lower Manhattan Development raised several objections to the proposal:

- The requirement to build to the Broadway lot line along its entire length in order to create a continuous street wall was not fulfilled;
- in consequence the required arcade along Broadway could not be built;
- the elevated shoping way along Trinity Place had been omitted; and
- it was argued that the plaza to the north would not receive sunlight.

Ranked fifth among the Mandatory Lot Improvements for block 20 N was an elevated plaza spanning Trinity Place. It was an important purpose of the plaza to receive from the north the elevated walkway along Greenwich Street. It was, therefore, a key component of the area plan. The district's text stipulates that the elevated plaza is not required if a small traffic-island-like triangular piece of property between Greenwich Street and Trinity Place were not available for development. In order to secure the construction of the elevated plaza, the city made the city-owned property available to the developer. This would have enabled the developer to count the deck in coverage computation and thus to provide a 55% tower with 35,000 sq. ft. floors as opposed to floors 23,000 sq. ft. in size, as in the developers' initial scheme. The city, however, also insisted that the requirement of building to the lot line up to the height of 85 feet be adhered to.

At the time of writing, it is too early to predict what the outcome of the process with respect to Block 20 N will be. Nevertheless, some observations are in order. It is extremely difficult to predict all eventualities and contingencies in advance. In the case of 55 Broadway, converting Floor Area Ratio into increased coverage was not an incentive. Neither was the requirement of building to the

lot line desirable, from the point of view of the developer. This would have brought about deep large floors with a considerable amount of secondary space which, the developer calculated, would command less rent than peripheral primary space on high floors. Moreover, in the high-coverage, high-density environment of Lower Broadway, the developer placed a premium on a plaza. Not only did it improve light and air, and thus the working environment and concomitantly rentals on the lower floors, but the plaza was also prestige-enhancing, considerably more so than an anonymous component of a contiguous street wall was, a circumstance to which developers and their clients, both corporate and non-corporate, attached considerable value.

Chapter 14

The Fifth Avenue Special District

The Fifth Avenue Special District continues the pattern that had begun to emerge in the preparation of the previous special districts, a pattern of designing a district around a specific building proposal. This chapter covers the first Special District to be adopted in Midtown after Mayor Lindsay's reelection.

On May 8, 1969, Mayor Lindsay established a special office to draft a master plan for the redevelopment of midtown Manhattan.[1] However, both the Mayor and the chairman of the Planning Commission, D. H. Elliott, denied that the new office would weaken the Planning Commission. "This office," Mr. Elliott said, "will be very closely related to us and will supply very substantial staff services."

J. T. Robertson, a key member of the City Planning Commission's Urban Design Group, was to head the new office. He said one of the principal reasons for creating a unit that will report directly to the Mayor was to enable it to oversee action by various city agencies, whose overlapping jurisdictions and competing goals often slow things down.

"At first, Don and I were hoping we would do this out of planning," Mr. Robertson said. "But agency jealousies make it very tough for one agency to be supervised by the other."

The move brought immediate criticism from Percy E. Sutton, Manhattan Borough President, who complained that "planning for midtown Manhattan would become the special preserve of the Mayor," and Mrs. Beverly Moss Spatt, a member of the Planning Commission, charged that the new office "further emasculates the commission," which she said "may very well be called in only at the 11th hour for statutory approval, after plans and programs have reached a point from which there is no return."[2]

The new agency was to coordinate such super agencies as the Housing and Development Administration, the Economic Development Administration and the Transportation Administration:[3]

> The city expects to use incentive zoning, urban renewal and other tools to replace certain rundown and underused sections of the midtown area between 30th and 59th Streets, with more efficient street and sidewalk patterns, larger, more functionally designed buildings and other structures providing access to the bank of the Hudson River.

With new subway lines going in and a superliner terminal planned, the pressure for private development was expected to increase quickly. Mr. Robertson said:[4]

> This is potentially one of the greatest real estate gold mines in the world. We're at a point where a lot of major decisions can be made. This kind of point comes about once every thirty years. Without coordinated planning, its going to be moved on randomly and in a piecemeal fashion.

Edward J. Logue, president of the N. Y. State Urban Development Corporation, speaking at a Regional Plan Association Conference at the New York Hilton Hotel, in November 1969, strongly dissented from the City's Master Plan on its "maximization of development in Midtown."[5]

He held that the midtown area had already been "overdeveloped." Instead, Mr. Logue said he favored enhancing Nassau County and White Plains as developing centers. Within the city, he said there is a desperate need to restore life and vitality in downtown Brooklyn requiring major policy decisions which have not yet been made, and to carry out development plans for Jamaica, Queens which he said "have not been implemented in a serious way."

A similar center of development was needed, he said, for the Fordham Road area in the Bronx. Harlem should have "more than one isolated state office being discussed." He said Union Square had once been a major center that had been allowed to slide. Such centers, he contended, would be inevitably sacrificed by overemphasis on midtown development. In taking exception to the Master Plan's stress on midtown development, Logue added, "I suspect I'm on the minority side and I'll lose."

Initially, Fifth Avenue had had a residential character. Before the Civil War it had been the residence of some of the nation's richest families, centering around Madison Square. Residences gradually moved northward followed by the retail trade. In 1895, DePinna's Department Store was opened on the south west corner of W 52nd and Fifth Avenue. In 1902, Franklin and Simon opened, followed by Tiffany's in 1903, and Altmans in 1906. Numerous small shops clustered around these large and prestigious stores. Between 1901 and 1907, with the construction of the Plaza, the Saint Regis and the Gotham, luxury hotels became a key Avenue

land use. The avenue began to perform an important ceremonial function and was the scene of many parades to celebrate ethnic holidays, civic and national events.[6]

On January 30, 1969, Percy Uris, chairman of the board of the Uris Buildings Corporation, speaking at the company's annual stockholders' meeting, announced plans for two midtown office buildings.[7] Both were to be located on side streets flanking Fifth Avenue:

- a 20 story annex for the 45 story J. C. Penny Building at 1301 Avenue of the Americas between 52nd and 53rd Streets, with 250,000 square feet of floor space. Penny, operator of a national chain of variety stores, leased 30 of the 45 floors in 1301 Avenue of the Americas, which was completed in 1964. The company was to occupy all of the annex, except for about 10,000 sq. ft. of ground floor space.

- a 350,000 sq. ft. office building to be erected on 53rd Streets, just east of Fifth Avenue, on a 17,000 sq. ft. plot that extends to 52nd Street. Immediately to the north is Paley Park. Mr. Uris said his company owned the plot, which included a variety of commercial buildings at 4 to 10 East 53rd Street and at 7 to 9 East 52nd Street. No Fifth Avenue frontage was involved.

At the time of the announcement there were 15,000 sq. ft. of stores. No chance was seen by Uris of creating that kind of store space in the new building. "It's a pity to see something like that disappear." Uris's spokesman regretted.

Under the C5 - 3 zoning regulations of the district, a builder might build a structure equal in floor space to 15 times the size of his plot and 18 times if he availed himself of the plaza bonus. In order to be able to utilize the plaza bonus and build an office building of conventionally profitable size and layout, it was necessary, in an

interior block location, to assemble 100 foot deep properties that were back to back. In this manner it became possible to achieve a parcel depth of 200 feet rather than one of 100 feet, if assemblage had taken place solely along one street.

The general pattern of office development was to develop the avenue sites first, then pressure was exerted on the side streets. In the case of Fifth Avenue, however, incursion of high rise office towers had been resisted. Office development emanating from Park Avenue to the east had leapfrogged Fifth Avenue, and Sixth Avenue had become the scene of intensive redevelopment. The Avenue had been protected against intensive office development, partly because of difficulties in land assemblage and high property values. With gradual exhaustion of suitable office building sites in midtown and their concomitant rise in cost, the character of Fifth Avenue began to be endangered. Moreover, banks, travel and airline agencies and corporate showrooms had been increasing their percentage of Fifth Avenue frontage. Several international stores, such as Gucci, Jourdan, and Mark Cross, as well as such banks as the Banco De Brazil, had appeared. These banks and stores sought the prestige of Fifth Avenue.[8] Their high rents for floor space at street level were at times subsidized through advertising budgets. Banks and airline ticket offices were particularly desirous of the advertising value provided by Fifth Avenue frontage. This trend left retailers, who could not afford the high rents, with only slightly more than 50 percent of the frontage from 34th Street to 59th Street. Georg Jensen's,

a landmark store on the southeast corner of 53rd Street and Fifth Avenue, was forced off the avenue. When their rent was doubled, they decided to move.

In the Summer of 1970, Steve Quick of the Office of Midtown Planning and Development described the situation with respect to Fifth Avenue as he perceived it from the point of view of his office.

> Buildings were being considered strictly on their own merits and considerations of buildings on adjacent parcels were disregarded. At no time were there visual projections of a physical and functional potential made over an area of three to four blocks. This led to Sixth Avenue which frightened the "hell out of everybody"

and showed that any character an area has was destined to disappear.[9] Now (Summer 1970) 5th Avenue begins to feel pressures of redevelopment. Its zoning designation is C5-3 which is a national center use zone with offices, showrooms, and wholesaling. "Zoning is only in respect to uses and does not concern itself with the physical sense." With the increasing land values, pressures for redevelopment have increased and 5th Avenue merchants are lobbying for something to be undertaken to preserve 5th Avenue's image as that of a "promenade and elegant avenue."

> Legislative aid is needed and this goes hand in hand with the special district which is an overlay on the existing C5 - 3 designated area. An example of how existing character can be thoroughly wiped out is the loss of 25 restaurants on one block alone on 6th Avenue.

The initial impetus to the Fifth Avenue Special District study had been an application in February 1970 by Sam Minskoff and Sons for a height and setback waiver on a small lot, the site of the De Pinna Department Store at the southwest corner of W. 52nd Street and 5th Avenue.

The lot was 99 feet x 118 feet (18,000 sq. ft.) The CPC could not give a variance and so the only recourse for Minskoff would have been to seek a variance on the basis of hardship from the Board of Standards and Appeals.

On Monday evening, October 7, 1970, the McCrory Corporation relinquished its lease, which still had 34 years to run, on the 12 story building at the northeast corner of Fifth Avenue and 51st Street, the home of Best & Co., a major department store. Next day, Best & Co. began a liquidation sale. Also on Tuesday, Arthur G. Cohen, chairman of the board of the Arlen Realty and Development Corporation, said that an Arlen Onassis partnership planned to erect a skyscraper, probably 45 stories tall, on the Best site. The block front running up to 52nd Street on the east side of the avenue was now completely controlled by a 50 - 50 partnership between Victory Carriers, Inc., a family trust set up by Aristotle Onassis, and Arlen Properties, Inc., one of New York's most active office-building firms, and one of the country's largest builders of shopping centers.

Best and Co. gave as a reason for relinquishing their lease rising land values spurred by the boom in midtown office building, which presented them with the possibility of making a greater profit by selling their land to a builder than they could by carrying on their business on the avenue.[10]

In announcing the building plans, Arthur G. Cohen called attention to two innovative features: an arcade at the rear of the plot and a park like setting for the Cartier, Inc. building located at the southeast

corner of Fifth Avenue and 52nd Street. The 4 story Cartier Building Co. was a designated city landmark.[11] It was built as a residence in 1905 from plans by Robert W. Gibson, and was remodeled for store use in 1917. Under the Landmarks Preservation Law, the exterior cannot be altered without city permission. Mr. Cohen said:

> We think that building is a jewel and we want to give it a proper setting. We plan to tear down the Olympic building next door along with Best's and we'll surround Cartier's with an open plaza so that it can really be appreciated.

According to the plans as they stood in Fall 1970, the planned arcade was to vary in width from 35 to 50 feet and was to be lined with boutique style stores, with the probable inclusion of an extension of Cartier's at the rear of the store.

The arcade at its north end was to face one beneath the 37 story office building under construction by the Uris Buildings Corporation, running through to 53rd Street. The arcade would terminate opposite Paley Park, the "vest pocket" park with a waterfall at its north end, a gift to the city from William S. Paley, chairman of the Columbia Broadcasting System.

In an interview with Glenn Fowler of the New York Times,[12] Mr. Cohen said he had talked with Federated Department Stores, owner of Bloomingdale's and Abraham and Straus, with the view to getting a high-fashion specialty store to take space in the new skyscraper. Federated controls I. Magnin, the West Coast Fashion Store. William G. Bardel, deputy director of the Office of Midtown Planning and Development, attached to the Mayor's Office, commented:[13]

> "We think it's absolutely essential to attract more retail trade to Fifth Avenue and we're optimistic about the developer's plans. We see it as something that could well be followed elsewhere on the avenue."

On February 1, 1972 Andrew Goodman, president of Bergdorf Goodman, New York's fashionable one-store retail establishment, indicated before the Federal Trade Commission that it might have to close its store at the northwest corner of 57th Street and Fifth Avenue and convert it to a high rise office building to obtain maximum "economic use" if the FTC disapproved Bergdorf's proposed purchase by Broadway-Hale Stores, Inc.[14] In testimony before the commission Edward W. Carter, Broadway-Hale's president, said that Andrew Goodman, president of Bergdorf, had approached him through an investment banker to buy the single store company and avoid the need to convert the property. Mr. Carter, in denying that the Bergdorf acquisition by the Los Angeles based Broadway-Hale - and the largest retailer in the west - would curb competition in New York, said it would instead be "pro-competitive." The many merchants of 57th Street in Manhattan "who live off" Bergdorf would be imperilled if that store closed. As the "anchor store" on that intersection, he said, "Bergdorf Goodman's leaving would have a devastating effect on the small merchants in the area." The closing on Fifth Avenue of Best & Co., Milgrim's and De Pinna's had caused a decline of consumer drawing power, which had hurt the nearby small stores, he said.

Allan R. Johnson, chairman of Saks Fifth Avenue and president of the Fifth Avenue Association, testified the following day that his company had "fully expected" to derive business benefits when Best & Co.

closed its Fifth Avenue store.[15] This, however, did not develop. "Not only didn't this happen," said Mr. Johnson, "but our own business has fallen off since then in certain areas." He said this experience proved that when stores go out of business, "their customers usually do not go to their competitors." The Fifth Avenue shopping area has "steadily deteriorated" over the last 15 years, Mr. Johnson said, with more banks and airline office's coming up, while the number of stores has been reduced. "I'm just not concerned about Bergdorf Goodman but about any store that goes out of the area." He added.

> "I'm very concerned about the deterioration of the Fifth Avenue shopping section anchored on the south by us and by Bergdorf on the north."

At the beginning of January 1973, 2 1/2 years later, Steve Quick related how Best and Co. had announced their closing on Friday and that Arlen had come in with a proposal on the following Monday.[16] The only handle that the office had on Arlen was Arlen's request for a special permit for covered pedestrian open space, he said. It was decided to simultaneously investigate both the possibility of granting a residential bonus through a special permit and the possibility of creating a Special District. As the office market had become "soft," Arlen liked the idea of a residential bonus. A basic agreement was arrived at between Cohen, the CPC and OMPD. Arlen was concerned about the time problem of getting the building into the ground and therefore requested that if a Special District were to be enacted, that a June 1, 1971 deadline be met. In January 1971, it was decided to drop the Special

Permit for a residential bonus and in February, the proposal for a Special Fifth Avenue District was made public.

On Tuesday, February 9, 1971, Mayor Lindsay proposed a special zoning district "aimed at sustaining and advancing the position of Fifth Avenue as the world's greatest shopping street and urban promenade."[17] Seated at the Mayor's side was Arthur G. Cohen, chairman of the board of the Arlen Realty and Development Corporation.

The Mayor said:

> Fifth Avenue is a street of exciting stores and important events, of dazzling window displays and colorful parades. It's a place to see and be seen, rich in ceremony and tradition, but it is also vulnerable to change; action is urgently required for it to remain the world's leading shopping street.

The Mayor noted that in recent years, banks and airline ticket offices had been replacing boutiques and specialty stores. "Now office development is planned on the former sites of Best's and De Pinna and is likely at the former Georg Jensen site. A recent survey indicates that there are 25 other sites which will be developed, several of which are currently being assembled."

> Without some form of public intervention, Fifth Avenue could be transformed from an international boulevard into a street lined with anonymous office buildings.

The study that led to the proposal was prompted by a plea for help from members of the Fifth Avenue Association, a group representing the principal merchants, owners and tenants on the avenue. They pointed out that the high fashion and the luxury shops on the avenue, along with the city's theaters and cultural institutions, were the prime

attractions that drew millions of dollars of tourist business to New York each year.

Alluding to the Special Theater Zoning District that was created in the Times Square area to encourage the building of legitimate theaters, association members had appealed for a similar device to encourage retailing on Fifth Avenue.

J. T. Robertson, director of the OMPD, noted that the prospective developer of the Best's site, Arlen Realty and Development, had co-operated with the city to achieve a proposal to conform with the goals of the zoning proposal.[18] The Special Zoning District was proposed to preserve and reinforce Fifth Avenue's distinctive qualities. It is bounded on the north by 58th Street and on the south by 38th Street. It extends 200 ft. east and west back from the Avenue street line, except between 38th and 40th Streets on the westerly side, where it extends 100 ft. The entire area is located within the underlying C5-3 District, which allows for a basic FAR of 15.0. With respect to uses permitted C5-3 is the most restrictive high density zone in the CBD. The traditional maximum FAR of 18 was still achievable through the use of an Elective Lot Improvement Bonus which includes numerous new bonus features, replacing the basic as-of-right plaza and arcade bonuses.

To assure the continuation of Fifth Avenue as Midtown's major retail street, a minimum amount of selected retail space (1.0 FAR) was made mandatory.[19] This amount is equal to about two stories of retail space. In addition to mandating a minimum retail requirement, the Special District encourages the provision of additional retail space on

Fifth Avenue through an innovative bonus schedule. For the first time, residential bulk is awarded as the bonus. The bonus for residential space rather than office space was chosen, Mr. Robertson said, because the city wanted to encourage people to live in the heart of the city and to provide around the clock activity on streets that ordinarily are dead at night. Another reason was the shortage of apartments, even for those who can afford luxury rents:[20]

> Hotels and residential units are desirable because they add to the housing stock and keep the streets alive in the evening; introduce a market for existing retailing; and help provide a necessary service for corporate headquarters located in Midtown. And because they provide walk to work accommodations, they reduce pressure on the transportation system.

There are two kinds of bonus systems:[21]

- On lots less than 30,000 sq. ft. in size, increased tower coverage in return for additional retail space.
- On lots over 30,000 sq. ft. in size additional residential bulk in return for additional retail space, followed by increased tower coverage for even more retail space.

In this manner for lots greater than 30,000 sq. ft. the potential bonus could amount to 21.6 FAR plus an increase in tower coverage from 40% to 50%. For every square feet of retail space above the mandatory minimum, the developer is awarded 4 sq. ft. of residential space. The developer may increase the FAR from FAR 18 by 20% to a total of 21.6. At an award rate of 1 to 4, this will result in an additional 0.9 FAR, or a total of 1.9 retail space. This is approximately equivalent to four stories of retail space. Moreover, the developer is offered an increase in

tower coverage from 40% to 50% if additional retail space is added.

- For each additional floor area ratio equivalent to .06 devoted to retail uses set forth in a special list (Use Group F) a developer shall be entitled to a 1.00 percentage point increase in permitted lot coverage; OR
- For each additional floor area equivalent to .18 devoted to residential or hotel use, a developer shall be entitled to a 1.00 percentage point increase in permitted lot coverage.

If the developer has exhausted the bulk bonus and has already achieved a 1.9 FAR for retail space, he may as an alternative provide additional residential space in the office tower in lieu of office space and receive the 10 percent increase in tower coverage bonus. In this manner the developer may achieve more residential space in lieu of office space. This option may be especially desirable in the event of a weak office market.[22]

The 20% increase in FAR (3.6 FAR) must be devoted to residential and/or hotel use, unless a hotel is the primary use on a site rather than office use, in which case the additional FAR must be used for residential purposes.

- On lots less than 30,000 sq. ft. in size, granting of the residential bulk bonus was considered not possible, due to the various site problems of accommodating ground floor service requirements, retailing requirements, the bonus amenity and public access. However, tower coverage may be increased 10 percentage points, from 40% to 50%, by increasing retail uses from FAR 1 to FAR 1.9.

- On lots below 20,000 sq. ft. in size, basic allowed coverage has been raised from 40% to 45%. Thus the increased retail means a coverage of up to 55%.
- Many retail establishments on Fifth Avenue have more than 1.9 FAR devoted to retail uses, e.g., department stores. In fact Georg Jensen, the department store that closed, was a 12 story building, most of which was devoted to retailing. Because of the possibility that there would be a need for more retail space than that bonused under the district's procedures, provisions are included under which the CPC may grant by special permit after public notice and hearing, and subject to Board of Estimate approval, an increase in the permitted lot coverage and modification of height and setback regulations for any development which includes at least a floor area ratio equivalent to 3.00 or greater devoted to selected retail uses.

The District's legislation contains a number of non-bonusable mandatory requirements related to the goal of assuring the continued stability of Fifth Avenue as a retailing street. Mandatory requirements pertaining to uses are as follows:

- A developer is required to devote the ground floor of his development, with the exception of lobby and servicing space, to selected retail uses.
- A development shall contain a minimum of 1.00 FAR of retail uses which is roughly equivalent to about two stories of retail space.
- Banks and airline ticket offices were to be permitted only above the ground floor but were to be counted in computing the retail requirements.

- Along the west street line of Fifth Avenue, above a height of six stories or 85 ft., whichever is less, the front wall of the building was to be located not less than 40 ft. from the street line on a zoning lot of less than 20,000 sq. ft. and not less than 50 ft. from the street line on a zoning lot of 20,000 sq. ft. or more. The requirement was not to apply to any zoning lot which was 100 ft. or less in depth from the Fifth Avenue street line.

The street bulk was treated asymmetrically to give recognition to the Fifth Avenue "wall" on the eastern side of the Avenue, an almost unbroken line of buildings extending from the frontage along Central Park south, past 42nd Street, at a height close to 15 stories;[23]

- to the western street line, with its massing similar to Rockefeller Center characterized by a six story high podium upon which rests a tower set back some distance from the street, as in the case of Tishman Building at 666 Fifth Avenue and Canada House. In this manner, at the height of 85 ft., the avenue will be 150 ft wide.

The terrace thus created was to be eligible for a floor area bonus if the following requirements were met:

- At least 25% of the terrace is planted, preferably with trees;
- the remaining terrace area is provided with benches for sitting and is suitable for walking. This portion of the terrace may include outdoor cafes; and
- the terrace is readily accessible to the public at least during normal business hours.

This requirement was included because non-retail uses such as banks and airline ticket outlets have moved into key locations, interrupting the flow of pedestrian shopping traffic from one store along the avenue to the next.

"The numbers alone tell the story," Mr. Robertson said.

"There were ten airline ticket outlets in the district in 1950; there are seventy now." (Feb. 1971). Ground floor space occupied by banks, which close at three o'clock, had also increased rapidly. "We firmly believe they belong in the district," Mr. Robertson said, "they just don't belong on the street level occupying the best retail frontage in the city."

With respect to the lot improvements, the following requirements were specified:

- No through-block arcades, plazas or plaza-connected open areas were to be permitted within 50 feet of the Fifth Avenue street line.
- Entrances to the office, residential or hotel part of the building had to be at least 50 feet back from the Fifth Avenue street line.

This was required in order to maintain retail continuity on the avenue.

A number of bulk envelope requirements pertaining to setbacks and "building walls" were mandatory:

- The front wall of all developments within the Special District were to extend along the entire length of the street line for a minimum height of three stories.
- Along the east street line of Fifth Avenue above the third story the front wall of the building or portion thereof, may be built up to the avenue street line.

Having fulfilled the mandatory requirements a developer may increase his development's bulk to the maximum allowed in the underlying district (18.0 FAR) by providing elective lot improvements. Several new options are introduced which, when applied, reinforce the design aims of the district and increase the amount of public space within a building. No Special Permit is required.

With the exception of the landscaped terrace, previously described, they may all be subsumed under the genaric heading of through-block connections. The through-block connections, similar to London's Burlington Arcade, are to eventually provide a supplementary walkway system parallel to Fifth Avenue. Such through block connections are:

- to be at least 30 ft. in height;
- to provide selected retail uses along at least 50% of their aggregate frontage;
- to have the same elevation at the sidewalk for a distance of at least 25 ft. into the zoning lot;
- to have adequate illumination, utilizing sunlight wherever possible;
- be accessible to the public and be suitably maintained.

Access to the through-block connection may be permitted either through a retail use or a public passageway no more than 15 ft. wide. Three types of through-block connections are identified:

- The Open Through Block Connection is similar in concept to the through-block plaza. It has an area of at least 8,000 sq. ft. and a minimum width at any point of 40 ft. and is to be open to the public at all times.

- A "Covered Through Block Connection" is a covered space complying to the following requirements:[24]

  Has an area of at least 6,000 sq. ft. and a minimum width at any point of 30 ft.

  Has openings at the face of the building for entrances at least 30 ft.in width and 30 ft. in height, and is unobstructed for a depth of 25 ft. opposite the entrances; and

  is required to be open to the public from 7 a.m. until 12 midnight.

The covered space may be either

- fully air-conditioned in summer and properly heated in winter, in which case the bonus award rate is 14 sq. ft. of additional square feet of residential space for 1 sq. ft. of covered space, or
- without air-conditioning and heating and is kept open for its full height at the entrances, in which case the award rate is 11 sq. ft. of additional square feet per sq. ft. of amenity.
- The Porte Cochere allows both pedestrian passage and vehicular access. It is permitted only in those developments containing residential or hotel units, and provides an interior drop-off. The area is divided into a pedestrian passageway of at least 15 ft. width and separated from the vehicular access area, by bollards, columns or other similar elements capable of withstanding automobile impact. It is subdivided into an automobile movement lane and a waiting area which may accommodate no more than three vehicles at one time.

Also included in the Elective Lot Improvements are modified versions of the covered pedestrian space and the Plaza which supercede,

for purposes of the Special District, their respective regular provisions. Both the plaza and covered pedestrian space were to be located in their entirety at least 50 ft. from the Fifth Avenue Street line, except for a covered pedestrian space provided for an interior lot on Fifth Avenue. A through lot was to be eligible for a plaza bonus only if a through connection is also provided within the development.

At the Feb. 9, 1971 press conference, it was announced that the zoning proposal was to be heard at the CPC's public meeting on March 3, 1971. Initial reaction to the proposal was generally favorable:[25]

- Michael B. Grosso, executive director of the Fifth Avenue Association, in joining the Mayor at the news conference at which the proposal was announced, said he thought it would be "very good" for Fifth Avenue and would help merchants maintain and increase their space on the thoroughfare.[26]
- Donald H. Elliott, Chairman of the City Planning Commission, described the incentive zoning for Fifth Avenue as "far-reaching but achieveable. The Special District is economically sound architecturally and functionally innovative, and a positive and persuasive planning device."[27]
- Samuel Lindenbaum, special counsel to the Real Estate Board, while endorsing the proposal, said the Board would seek some amendments to make the provisions more flexible.[28]
- Arthur G. Cohen, seated at the Mayor's side and chairman of the Board of the Arlen Realty and Development Corporation, which jointly with

Victory Carriers, an Onassis family trust, owned the site of the former Best & Co., store, warmly endorsed the proposal and said he would take advantage of the bonus elective to erect a 45 story building with as much as 150,000 sq. ft. of retail space on the lower floors, offices in the middle floors and apartments on the topmost floors. Running behind the tower from 51st to 52nd Street would be a two-story arcade for shops, cafes and services.[29]

- Commenting on bonuses in the form of residential space instead of the usual office space, A. L. Huxtable, the architectural critic, said it was much better to put up luxury apartments on Fifth Avenue, than it was to "up-zone" uptown side streets, as had recently been proposed, which would have worsened transportation and destroyed neighborhood quality and scale.[30]
- Peter Blake commenting in the same vein wrote that the "lure of a Fifth Avenue address will attract a great many developers whose expensive co-op apartment schemes are currently threatening some very nice and stable middle-income brownstone neighborhoods.[31]
- In commenting on the additional densities brought about by the bonuses, A. L. Huxtable wrote that the point at which increased density tips the scales against planned improvements is a matter for the Delphic Oracle.[32]

Adverse reaction to the proposal came from Percy E. Sutton, Borough President of Manhattan and member of the Board of Estimate. Through a spokesman he said that he was angered by the failure of the

Midtown Planning Office to consult him as it drafted the proposal.[33] Mrs. Carol Greitzer, the Councilman whose district includes the Fifth Avenue shopping, similarly complained that she had not been consulted.[34]

On March 3, 1971, the City Planning Commission adopted the Special Fifth Avenue District. In his concurring statement, CP Commissioner Walter McQuade voiced two criticisms both concerned with the through block connections.[35]

- He regretted that the through-block pedestrian connection would be used as a porte-cochère for automobile traffic.

> There goes the pedestrian - dethroned. Once let cars into these crosswalks and the cars will dominate them. Cars will be impossible to police. They will also knot up traffic making the turns in from the east-west side streets.....I cannot for the life of me see why we are inviting them into this pedestrian domain in the middle of the block.

- Secondly, McQuade criticized permitting doors on the pedestrian inner-block crosswalks. He maintained that this would convert them into lobbies.

> "A door says 'stay out'--even the door to the Ford Foundation Building's garden. A door also says: "artificial environment inside." People will stay out. The shops of these little crosswalks will get much less trade than if the openings were really open, not confused by revolving doors."

The district proposal was endorsed at the March 3 hearing by representatives of the Real Estate Board of New York, the Fifth Avenue Association, the Citizens' Housing and Planning Council of New York, and the Municipal Art Society.

On March 12, at the subsequent hearing before the Board of Estimate, however, Beverly Moss Spatt, a former city planning commissioner, criticized the Fifth Avenue proposal on the grounds that retailing in Manhattan did not need a subsidy and that the special zoning would not keep businesses from leaving Fifth Avenue:[36]

> "Retailing in Manhattan is not in difficulty and needs no subsidy. Only a few intermediate sized stores on Fifth Avenue have experienced trouble. The city is using its zoning authority in behalf of specific private interests. In fact, the city would be subsidizing Fifth Avenue stores while stores in other areas receive no similar public support. This special district plan, apparently, is nothing more than a disguised cash payment to Fifth Avenue merchants, realtors and developers."

J. T. Robertson said of Mrs. Spatt's views: "I think she has a misunderstanding of retailing in New York City."

Nevertheless, some of the borough presidents on the Board of Estimate then began asking questions: What about help to Fordham Road or downtown Brooklyn? Opposition was also expressed on the grounds that the District would provide housing and shops for the rich, but would neglect the poor. As a result, the Board of Estimate put off voting on the proposal until March 25, when it was adopted.[37]

The dispute, however, did not deter Henry H. Minskoff, president of Sam Minskoff and Sons, from acquiring on March 18 a 12 story building, formerly the home of Georg Jensen's, from Isidor Konein. The Minskoff's planned to strip the building to its steel frame and renovate it for office tenancy. There was no intention, however, of including apartments.[38]

The new zoning directly affected a lease that American Airlines had signed for space on the ground floor and in the basement of the building situated at 655 Fifth Avenue. The space amounted to about half the ground floor - a total of 3,000 sq. ft. - and far exceeded the permissible 10 percent ground floor space that a bank, travel agency, or airline could use in any one building.[39]

On August 31, 1971, Mayor Lindsay and Arthur Cohen, chairman of the Board of Arlen Realty and Development Corporation, announced plans for the first project under the provisions of the Fifth Avenue Special Zoning District. It was to be a 50 story mixed occupancy building on the site of the former Best & Co. store. Donald H. Elliott, Chairman of the City Planning Commission, said:[40]

> "The speed with which this project has progressed reinforces our confidence in the Special Zoning District concept. It also confirms my belief that this type of zoning is sufficiently flexible to allow the city to respond effectively to the special requirements and needs of different areas of the city."

J. T. Robertson, Director of the Office of Midtown Planning and Development, whose office prepared the District legislation and had worked closely with Arlen Realty in developing plans for the project, said:[41]

> "This building, an exiciting new prototype, represents a major contribution to the future development of Midtown Manhattan. Mixed-use buildings of this type enjoy the advantages of a balanced urban environment and make more efficient use of the city's core area. I would say this building heralds a new trend in Midtown.
> Many of the urban design objectives that the city has been trying to achieve for such a long time will be incorporated in this one building."

The building was to contain:

- Two floors comprising in excess of 100,000 sq. ft. of retail space fronting on Fifth Avenue
- 19 floors (3 through 21) providing 400,000 sq. ft. of office space. Access to the office part of the tower was to be from the arcade, a two-level through block connection lined with shops and a restaurant and containing the building's main entrance.
- 27 floors (23 through 49) of cooperatively owned apartments above the office floors (providing 400,000 sq. ft. of residential space and 260

An underground connection below the streets to Rockefeller Center and the 53rd Street IND subway station was negotiated. The proposed below grade concourse was to run from Rockefeller Center below Fifth Avenue and the shopping arcade of Olympic Tower to 52nd Street, where it was to meet another underground concourse continuing to the 53rd Street subway station. In this manner, the underground system begun by Rockefeller Center in the 1930's would be increased by approximately 700 ft.

The office part of the building was to be constructed of steel, while the residential part was to be concrete. By constructing the co-ops of concrete, heavy steel beams intruding in the apartments will be avoided.

Melvin Dawley, chairman of the Fifth Avenue Association, said:

> "This exciting building project marks another interesting chapter in the history of a great avenue - we look forward to its completion."

The cost of the project was to exceed $30 million. The owners expected the building to be open for occupancy in the summer of 1973.

Mayor Lindsay congratulated the development community for their contribution to Fifth Avenue and the city:[42]

> "I view this project as a tremendous vote of confidence in Fifth Avenue from the business and development community and as a clear demonstration of the city's ability to adapt to change and to create a new urban environment."

The plaza bonus system of 1960, served in a major way to deflect development of office towers away from Fifth Avenue and thus to protect the existing character of Fifth Avenue. In that it could only be used satisfactorily on large sites, because of the necessity to create large floor plans in towers. Where the intensity-of-use was low as it was on Sixth Avenue, the plaza bonus exercised a powerful incentive for assemblage to occur so that the maximum FAR of 18 could be availed of by taking advantage of the 20% plaza bonus, while at the same time, providing satisfactory floor sizes.

With an already existing intensity-of-use on moderately sized and small sites considerably higher the potentially achievable intensity-of-use differential would be even lower on Fifth Avenue then on Sixth Avenue, if development could only occur at or just above the base level of FAR 15. The case if the plaza bonus could not be taken advantage of.

The plaza bonus system of 1960 was effective in warding off incursions on Fifth Avenue, until the Arlen-Onassis interests and the Office of Midtown Planning and Development collaborated on the design

of a new structure for the Best Department store site. On the basis of this collaboration, it became possible, in spite of a decline in office demand, for the Arlen-Onassis interests to be assured of an achievable intensity-of-use differential of such magnitude as to warrant their buying up the lease on the Best Building site.

In this manner the new zoning policies of the city contributed in a major way to encroachment of Fifth Avenue, an encroachment that, thus far, had successfully been warded off in spite of great demands for office space. An indication of the degree to which the hitherto existing incentive zoning system had served to protect Fifth Avenue, is the fact that when pressures for office development reached a peak, limited office development occurred on Fifth Avenue side streets, rather than on the Avenue itself. This was a reversal of the usual pattern in which, only after available avenue sites had been availed off, development started to shift to the adjacent side streets.

The fact that the Best site already had a high intensity-of-use resulted in extraordinary measures to achieve a postulated high intensity-of-use differential. They included:

- Stripping away of the plaza bonus, thus reducing the necessity for a block front wide site to achieve satisfactory floor sizes.
- Substitution of the plaza bonus schedule which would have allowed for a maximum FAR of 18, on a large site, for a bonus award and amenity schedule that allowed for a maximum FAR of 21.6 on sites considerably smaller than the conventional site, where the plaza bonus was applied.

- Increasing tower coverage to 50% so as to make it possible to provide large floors on the smaller sites.
- The substituting of office space for residential space, to allow for luxury condominiums.

The achievable intensity of use differential for the Arlen building, was also affected by a number of other factors. The negative effects of the high densities and high coverages, however, were mitigated, in the case of the Arlen building, by virtue of the fact that it was immediately adjacent to St. Patrick's Cathedral to the south, which, dwarfed in scale by the towering skyscraper, served as an air park and secured outlook. To the north and on the same block, the low-rise landmark building of Cartiers contributed to keeping averaged out densities for the block front lower than had the whole 200 ft. block front been redeveloped from side-street lot line to side-street lot line. Moreover, the Onassis building benefited from the asymmetrical Fifth Avenue cross section, that was mandated, in that, situated on the east side of the avenue, it could rise vertically for its full height without any setback from the avenue lot line, whereas buildings on the west side would have to have a substantial setback at a 85 ft. cornice line. An added advantage for the Arlen-Onassis building, was that it could key into a back-from-the-avenue through-block walkway system, reaching from St. Patricks Cathedral to Paley Park, the vest pocket park. The elaborate back-from-the-avenue through-block pedestrian passages were a major selling point of the

Special District legislation. However, the Minskoff proposal for a smaller corner site demonstrated the difficulty, on Fifth Avenue, of block front sized increments being developed at one time. In consequence, a through-block through connection may take many years to be completed or may even never be completed. In the meantime, the question arises of whether the first part of the connection can be put to some interim use.

The district's bonus award and amenity schedule, does not exercise a strong incentive towards assemblage as did the plaza bonus system on Sixth Avenue.

In that it encouraged the redevelopment of small and moderately dimensioned sites, where the existing intensity-of-use is low, it may be counterproductive to the district objective of securing through-block connections.

Where development under the district's legislation has occurred on part of a blockfront; cramped conditions and an existing high intensity-of-use on the remainder of the blockfront, in conjunction with the elimination of the possibility of pooling blockfront sites, given high density redevelopment of one part of it, will reduce the chances for completing blockfront redevelopment and concomitantly, reduce the chances for completion of through block connections.

While the Arlen-Onassis interests were able to derive substantial commercial advantages, in the design of the building, from the close collaboration with the Mayor's Office, the question arises whether the strictures of the Fifth Avenue Special District legislation will be detrimental to further development.

Chapter 15

Mixed-Use Districts: A Response to Office Overbuilding

As the demand for office space further declines a hitherto neglected building type, the mixed office-residential building, assumes new significance.

On January 19, 1972, the City Planning Commission scheduled a public hearing on a proposed amendment to the Zoning Resolution to establish districts in which office and residential uses could be mixed on the same site. The hearing was held on February 2, 1972 (Cal. #41) and continued on March 1, 1972 (Cal. #42).

By mapping mixed-use districts in existing office zones, it was hoped to establish a new housing market. The 1961 zoning provisions did permit mixed use residential and office buildings. Yet such developments were considered impractical from an economic standpoint because additional density and floor area regulations were placed on such structures. The 1961 Zoning Resolution's regulations pertaining to mixed-use building were based on the supposition that mixed-use buildings add to the intensity of use of any given area. Therefore the number of residential zoning rooms was restricted. In consequence, total achievable development bulk was lowered. Moreover, more at-grade "plaza" amenities were required than for any other building type. Under 1961 rules, there were three options open to the developer:

- an all residential building of no more than FAR 12 (10 + 2)
- an all office building of up to 18 FAR (15 + 3)
- or a mixed building whose FAR lies somewhere in between.

Under 1961 rules zoning density calculations are based upon lot area requirements (30 sq. ft. per residential zoning room and 6.5 sq. ft. for each 100 sq. ft. of commercial floor area). In consequence as the mixture of office and residential use is varied, the lot area requirement for each use changes accordingly. The lot area requirement works toward lowering the amount of office space that may be built, when residential rooms are maximized. If a developer were not to maximize the residential part of the building and instead sought to achieve the maximum 18 FAR bulk, keeping within the bounds of the allowable 12 FAR residential bulk, room sizes would become too large. This is because the number of zoning rooms is reduced even though the floor area of 12 FAR remains the same.

An additional deterrent to the development of mixed-use buildings were the requirements of Section 35-35 (Floor Area Bonus - for Plaza, Plaza-Connected Open Area, or Arcade in Connection with Mixed Buildings). This section stipulated that each use have its own "plaza" bonus. I.e., in the case of a mixed building with a total FAR of 18, a plaza bonus of 5 FAR had to provide (3 FAR for the commercial portion and 2 FAR for the residential portion as compared to the usual 3 FAR). With the amount of plaza area much greater than that required if the uses are separated, a larger site is required to develop a viable mixed use building with an FAR of 18 than is required to develop an office building. Built on

the typically sized office building site, the bulk of the mixed-type building would be constructed and construction would become too costly. Moreover, by virtue of the low coverage, the location of desired retail activities at ground level would be curtailed.

As a result, since 1961, only one mixed-use building, a structure at 53rd Street and Second Avenue, was built according to the zoning regulations.[1] A second structure, the Excelsior, located at 57th Street and Second Avenue, received numerous variances.[2] The most recent high density mixed use development is the One Lincoln Plaza Building, the district-initiating building of the Lincoln Square Special District. It, too, however, received variances in the form of additional bulk concessions from the Board of Standards and Appeals.

The only other high-density mixed use building of recent years is a grace period building built under the provisions of the 1916 zoning resolution, and was not subject to the bulk limitations of the FAR formula - the United Nations Plaza Buildings. It combines two residential towers atop an office base and has become one of the East Side's most prestigious addresses. All these buildings had proved rentably successful.[3]

A number of causes contributed to the dearth of mixed-use buildings:

- Land and development costs militated against developments that did not maximize their FAR potential.
- Office space commanded much higher rentals than residential space, particularly in the period ensuing the grace period when a glut of

residential space depressed the residential market.

- The rules were written so as to impose economic penalties on the developer of a mixed office residential building.

With the dramatic deterioration of the office rental market, the extreme shortage of housing, even of luxury apartments, and concomitantly a strengthening market for condominiums, strong pressures were brought to bear to amend the Mixed Building zoning. The following measures were proposed:[4]

- To delete Section 35-41 (Lot Area Requirements for Non-Residential Portions of Mixed Buildings). Thus, in specified districts ("CR" Districts)
- it became unnecessary to count residential zoning rooms on the basis of reduced lot area,
- the number of zoning rooms might be as high as the maximum number permitted by the district zoning.

I.e., the room count was to be calculated as if the residential use were the only use on the site.

In this manner, the penalizing effect of the previously applicable provisions was removed. As a result, an FAR of 12 of residential floor space was permitted in an 18 FAR structure, while, at the same time, room sizes were normal. In order to control the residential zoning room count a floor area per room control is introduced to replace the lot area requirement, which allows the same number of rooms as allowed in a R 10 building, while at the same time an FAR of no more than 12 is assured for residential floor space.

- Only lots of more than 20,000 sq. ft. were to be eligible. This was to assure sufficient ground level space for the residential service core, the office core and retail use.

Several requirements were stipulated for developments using this mixed-use option. They are as follows:

Tenant Recreation Space

A minimum of 5,000 sq. ft. of tenant recreation space accessible only to tenants and their guests. Portions of the space may be covered and enclosed. They may be located in one or several locations throughout the development. Enclosed areas count toward floor area calculations. The purpose was to provide indoor spaces for winter and exterior, landscaped, open and shaded spaces for the Summer.

Service Area

Bonused Pedestrian Amenity

All mixed buildings utilizing these amendments regardless of development floor area are required to provide pedestrian amenities which generate a floor area ratio bonus equivalent to 2.5. These might be

- a through-block arcade
- a plaza
- an arcade
- a plaza connected open area or any additional amenity or combination of amenities.

As a result the bonused pedestrian amenity working in conjunction with the tenant recreation space required, this building type when measured on a per residential zoning room basis will contain more open

space amenity than an all residential or an all office structure. Concurrently, the requirements of section 35 - 35, that required that each use have its own "plaza" bonus, were removed.

- Mechanical Equipment Screening was to be provided to assure that adequate noise and environmental screening is provided persons using the tenant recreation space.
- All setbacks occurring in the commercial portion of the building greater than the required minimum of 20 ft. must be landscaped.[5]

> "The term landscaping has been kept specifically general in this instance in order to permit experimentation and design flexibility. Trees and shrubbery are desired - but not required. Public and private access is desired but not required. The reason for this requirement is twofold: should the tenant recreation space be located on the roof of the tower this will guarantee that the tower base will be treated (note: tenant recreation space when located on the roof of the commercial portion may substitute for this requirement to the extent that the recreation space develop the roof area requiring landscaping, and that the landscaping will add to the residential character of the building as well as provide an air-park for the surrounding building. Landscaped setbacks and roof areas can become actual amenities and provide the city with some additional visual pleasure." (CP 21848)

A major easing of parking requirements was proposed. Under then existing rules, 40 percent residential parking spaces were required. An additional 225 space garage was optional. The mandatory 40 percent required residential parking regulation was waived making such requirement optional. No more than 225 spaces were to be permitted, the same number as in office structures.

Modifications of the height and setback and yard regulations for a mixed building development were to be permitted, provided that it was found:

- That such modification will enhance the relationship of the building to nearby buildings; and
- That such modification will aid in the concentration and enhancement of the area or areas required for recreational space, other than provided pedestrian amenities.

It was expected that the mixed-use concept would generate a number of benefits:

- To counteract the decentralization of the office industry encouraged by the availability of desirable housing, it was felt that, in order to compete effectively, NYC must provide opportunities for living and working in the centre city.
- Because of the fact that floor area devoted to each person is less in apartments, than in offices, mixed-use building may lead to an on-site population one third less than that in all office building.
- Increased street activity was expected to result from the additional residential component, particularly in the evenings and on weekends. Retail stores, restaurants and other activities were expected to benefit. A safer environment would result.
- The concept was expected to relieve pressure on middle-income brownstone neighborhoods and residential side streets, which were threatened by high rise co-op apartment schemes.

"CR" Mapping is within existing 15 FAR office districts, except for a small portion of the Special Greenwich Street Development District mapped 10 FAR but with a 15 FAR option.

In determining the mapping of appropriate areas, it was considered whether

- there already was a mix of these two uses which could be reinforced,
- some supportive services and residential amenities already existed
- an additional servicing load could be kept to peripheral office areas.

The area north of 53rd Street, in central Midtown and the Lexington Third Avenue spine in east Midtown currently contain grocery stores, doctors and residential structures, as well as offices. They represent the northern and eastern transition zones in Midtown where most development is currently occurring. The mapping excludes the previously enacted Special Fifth Avenue District.[6]

In Lower Manhattan, the "CR" zone formed a ring around the regular office core. In as much it created a transition zone between the core and the proposed developments off-shore.[7]

> "Building in the transition zone will serve three Lower Manhattan functions: it will improve existing relationships to mass transit, it will create new pedestrian linkages from the core to the off-shore developments, and it will provide residential services to support new off-shore housing."

Included in the remapping is a site for a mixed building on a zoning lot running through from East 57th Street to East 58th Street between Park Avenue and Lexington Avenue. The major portion of the site is zoned C5 - 3 (FAR 15) and the remainder is zoned C6 - 4 (FAR 10). The remapping placed the entire site under a unified C5 - 3CR (FAR 15) mapping designation. The applicant agreed to restrict the area formerly

mapped at C6 - 4 to C6 - 4 bulk regulations. In this manner, a bulk increment will be conveyed to the former C5 - 3 portion of the site. Plans for the building were announced by Mayor Lindsay at a press conference on February 2, 1972. Joining in the announcement, was Edward Glickman, a partner of Madison Equities, the developers of the proposed mixed occupancy structures.[8] Madison Equities, a real estate development and investment partnership, had been active in Midtown Manhattan. They had been developers for the Excelsior on East 57th Street, one of the very few mixed occupancy buildings built in recent years. The proposed building by Madison Equities is to be located on the north side of East 57th Street between Park and Lexington Avenues. Located next to the Ritz Tower Hotel, the site includes the New York Genealogical and Biographical Society building, which will be preserved.

Plans for the building, consisting of a residential and office tower atop a 64 ft. high commercial and retail base, included:[9]

- A public covered pedestrian plaza linking 57th and 58th Streets, This split level galleria will contain a 90 ft. high skylit "atrium" at its center point. The plaza is to be lined with shops, including a sidewalk cafe.
- 7 floors of office space, of which two levels in the tower contain medical suites, served by a separate lobby. The main lobby for the office space is entered through the covered pedestrian plaza.
- Over 310,000 sq. ft. of cooperative apartments in the top floors of the tower, with views of Central Park and midtown. A typical floor

contains eight apartments and the entire building contains over 260 units.

- Located atop the commercial and retail portions of the building will be a swimming pool and sun deck connected to a health club beneath the tower. The roof of the tower contains over 6,000 sq.ft. of landscaped tenant recreation space.

Consulting architects for the residential portion of the building was the Office of Philip Birnbaum. His office had prepared the plans for 1 Lincoln Plaza, the district initiating building of the Lincoln Square District.

The public hearing on the proposed amendments was held on the same day that Madison Equities plans were made known. The hearing was continued on March 1, 1972. On March 14, 1972, the City Planning Commission adopted the amendments.

At the same press conference that the Madison Equities plans were announced, plans were unveiled for the second skyscraper to be built under the provisions of the Fifth Avenue Special District.

It will be recalled that in February 1970, i.e., two years prior to the announcement, Sam Minskoff and Sons had applied for a height and setback variance on a small lot (18,000 sq. ft.) (99 x 118 sq. ft.), the site of the former De Pinna Department Store. This application had subsequently led to the studies for the Fifth Avenue Special District. Because the site was less than 20,000 sq. ft. in size the building was ineligible for the residential bonus.

The building was to house more than 30,000 sq. ft. of retail space, about twice that required by law.

The shopping area on four levels was to be accessible directly from Fifth Avenue and also from a 4,000 sq. ft. public promenade with 30 ft. high ceilings. Its 85 ft. wide entrance on West 52nd Street is on axis with the existing through block arcade linking 52nd Street to 53rd Street and the Independent Subway Station. Escalators to upper and lower levels will provide access to several floors of shops. The space will not be enclosed, thereby providing easy pedestrian access to the retail shops and in the future, to an underground concourse connecting it to Rockefeller Center.

Above the retail floors and public promenade was to rise a tower containing 300,000 sq. ft. of office and professional space on 29 floors. 650 Fifth Avenue was to be 37 floors high, including two levels below grade and two floors of mechanical equipment. Architects were John Carl Warnecke.

Jaquelin T. Robertson, director of the Office of Midtown Planning and Development, whose office authored both zoning proposals and who had worked closely with the developers in planning for each of their projects, commented as follows on the mixed-use concept:[10]

> "The mixed use building, first formally put forward last year in the Special Fifth Avenue District, is a major break through in our search to continue the viable development of our high density center cities. By combining retail facilities or housing with offices in a single building, not only does a given piece of land and its supporting services begin to work more efficiently over a 24 hour period, but the vital, life-giving and

> mutually supportive activities of shopping, recreation, working and living are brought back into our downtown."

Although the Mayor did not mention it, the projects were initiated at a time when vacant office space in post war office buildings totalled 10 million sq. ft. just short of half a square mile. Mayor Lindsay, in hailing the new mixed-use building trend, said:[11]

> "If we are to preserve New York's position as the corporate capital of the nation, we must continue to test new and promising approaches in planning for office areas. Experimentation requires a large measure of courage and I commend the development community for their commitment, foresight and cooperation in working with us on these projects.
>
> The vitality of the city's office industry depends upon a healthy mix of retail, housing, recreational and other uses. I view both of these buildings as outstanding examples of a new trend in office planning. They are the result of the innovative approaches we have taken in incentive zoning."

The mixed-use districts is a further example of a special district designed around a single building. Again, as earlier in the theater district, the district initiating building straddles zoning district boundaries.

Mixed-use buildings in Central Business District locations are attributable, primarily, to the weak market for office space.

Chapter 16

The Emerging Role of Development Rights Transfers in the Management of the Spatial Environment

This chapter describes how density transfers gradually began to emerge as an important tool in the management of the spatial environment and how the 1960 zoning resolution is gradually being adapted to accommodate such changes.

Even before the introduction of the 1916 code, Ernest Flagg had suggested that property owners be allowed to sell their rights to develop 25% of their lot to any height to adjacent property owners.[1] And in the 1920s, he modified his proposal to allow trading of tower development rights between non-contiguous plots but within a city block.[2]

In 1965, in the case of the Chase Manhattan Building, it became possible, through street closing, to transfer development rights to the northern portion of a consolidated site, thus enabling the provision of a large plaza. Later, after introduction of FAR as a density measure, development rights were transferred across another stretch of the same street, to provide a sufficiently large achievable density differential for a projected skyscraper for the United States Steel Corporation to warrant demolition of the Singer Building, once the world's tallest.

When the Tishmans built a major office building on Third Avenue, they acquired for the sum of $1,000,000 the unused development rights of P. J. Clarks, an Edwardian style pub.[3] The pub had achieved fame in a film and the owner was consequently reluctant to sell. Moreover, the Tishmans could derive significant advertising value from the distinctive pub.

The first projected transfer of development rights in New York City involved Amster Yard, a group of picturesque mid-19th century buildings located around an attractive courtyard. After World War II, James Amster rehabilitated the buildings and created a small park in the middle of Manhattan. To the west of Amster Yard, on Third Avenue between 49th and 50th Streets, Laird Properties was planning in 1969 to build an office building containing 580,000 sq. ft. of space. Laird was planning to buy 30,000 sq. ft. of that total from Amster Yard, which had been designated a Landmark in 1966.[4] Amster Yard, Inc., was to receive nearly $500,000 from Laird Properties for this transfer of its unused development rights. This one transfer would use up all the potential of the Landmark site. One hundred thousand dollars of the Laird payment was to go into a trust to be used for the maintenance and preservation of Amster Yard.

After the defeat of the Transportation District Legislation aimed at stopping a second tower above Grand Central, the Department of City Planning investigated alternative ways of stopping the structure. On September 20, 1968, the Landmarks Preservation Commission determined that the Penn-Central Company's application for a certificate of No Exterior Effect relating to the proposed 55 storey tower over Grand Central terminal did not meet the requirements for a certificate.

On April 10, 1969, a public hearing was held before the Landmarks Preservation Commission to consider the Penn-Central's subsequent application for a Certificate of Appropriateness for permission to build one of two proposed office tower schemes over the station. The CPC found both the Breuer designs "although commendable in many important ways, incompatible with good planning principles and the orderly long-range growth and development of the Grand Central area," because:

- the building's 12,000 workers would throw insupportable stress at this time on the already grossly inadequate Lexington Avenue subway and platform system;
- construction of either building would commit the city to an irrevocable error -- "destruction of the only existing reservoir of sunlight and air in this district."[5]

In the period from September to April, 1969, the Department had investigated other alternatives available to Penn-Central "to deal more rationally and more humanely with these two problems."

In noting that Penn-Central owned large parcels of property adjacent to the terminal from 42nd to 50th Streets, representing "a ring of high density development with vertical circulation rising on the periphery of an essentially open horizontal central circulation system, ... i.e. the existing concourse and the two levels of track to the north," J. T. Robertson, Director of Midtown Planning, criticized the Breuer proposal to put 2.1 million sq. ft. of office space directly atop the station because it would defeat "this intrinsically sound ring idea by intruding still another monolith into the center of the ring -- a superimposition of vertical over horizontal circulation at the very point of maximum congestion."[6] If 12,000 more people must be accommodated, placing the building on the periphery of a central concourse area seemed the superior planning notion:

> to the Department of City Planning because the Breuer proposal would not only increase congestion on the platforms, but would also strip away the brakes and filters of the inefficient street and pedestrian system, disgorging concentrations of people directly onto the system before any diffusion took place.

As alternatives, then, to the Saady-Breuer proposal, the Department investigated the possibilities of transferring the development rights from above the terminal to adjacent sites on the ring. It was proposed that the 2.1 million sq. ft. of the proposed Breuer building be distributed among two or more of Penn-Central's holdings as additions to the allowable floor area.[7] The sites included:

- the block from 42nd to 43rd Streets, between Vanderbilt and Madison Avenues,
- the Roosevelt Hotel site between 45th and 46th Streets,
- 466 Lexington Avenue from 45th to 46th Streets,
- the Post Office site on Lexington Avenue between 44th and 45th Streets, which although owned by the Federal Government, might well become part of a development project.

For example, if the Breuer space were to be distributed between the two sites to the west, allowable floor area on each site would be increased from 630,000 sq. ft. to 1,700,000 sq. ft. Similar distribution on a 25% basis to each of four sites could be effected if the Post Office and 466 Lexington Avenue sites were added to the other two.

The Planning Commission already had the power by special permit to allow a transfer of development rights from a zoning lot upon which a building designated as a landmark is situated to an adjacent zoning lot. As the law then read, however, no adjacent zoning lot could be increased by more

than 20%. The Planning Commission now suggested that the Zoning Resolution be amended to allow greater flexibility in bulk transfers to enable most, if not all, of the allowable floor area to be transferred to any combination of adjacent blocks.

Subsequently, negotiations between the Office of Midtown Planning and Development, representatives of Penn-Central Railroad, their developer Maurice Saady and their architects, Marcel Breuer and Associates, were carried out regarding the transfer of air rights from the Grand Central Station Landmark site to an adjacent zoning lot under their ownership, the block between Madison Avenue, Vanderbilt Avenue, 44th and 43rd Streets. Long term leases at many of the sites in the ownership of Penn-Central to which surplus air rights could conceivably be transferred posed complications.

On the 11 September, 1969, Marcel Breuer presented to the Office of Midtown Planning and Development a proposal for the Biltmore site, providing a 30 foot wide landscaped arcade on Madison Avenue, and a 30 foot wide arcade on Vanderbilt Avenue:

> ...infilled at ground level with shops which created the possibility of using the shop roof level for some amenable and possibly bonusable use. 8

This scheme was superseded by a proposal which provided a landscaped plaza 35 feet wide and a 10 foot wide arcade on Madison Avenue; and 16 foot wide arcades on both 43rd and

44th Streets. In addition to this, the building was setback 2 feet on the streets and 4 feet on Vanderbilt Avenue. Access to the Grand Central Concourse was provided from both street arcades.

This second proposal met with some criticism from the Office of Midtown Planning and Development as it did not provide enough plaza or arcade space to generate a maximum FAR of 18.[9] The FAR as-of-right for the building minus the transferred FAR was 17.2. The area's base FAR level was 15. By providing bonusable amenities, the FAR level could be raised to 18. While the Office did want the transfer of air space from the landmark site, it did not, however, want this to be at the cost of losing bonusable amenities. If additional building bulk could be won through the transfer device the developer might not want to provide plazas and arcades, the usual way by which to increase the FAR from 15 to 18.

> Both proposals have demonstrated serious concern on the part of Mr. Breuer and his clients for public circulation and amenities, however, some problems still exist. One is the fact that not enough plaza or arcade space has been provided to generate a maximum FAR of 18.[10]

The Office suggested a number of alternatives, which would provide bonus square footage in amounts that would allow a maximum as-of-right FAR of approximately 17.7.[11] The Breuer proposal would allow a FAR of 17.2. To this FAR of 17.7 would then be added the FAR points resulting from the

transfer.

From the following zoning computations, the order of magnitude of the transfer will become apparent. The transfer of development rights would enable the erection of a building three times the size of a building otherwise allowed under the zoning resolution. The net transferable FAR from the existing Landmark lot amounts to 2,151,000 sq. ft. For a building under as-of-right allowables with bonuses, with a square footage of 741,372, the FAR would be 17.1, i.e. .9 points below the maximum possible FAR of 18. 1,375,128 sq. ft. would be needed to be transferred from the landmark site to build a 62 storey tower, of which the upper 59 storeys would each have a floor area of 34,500 sq. ft. with a total of 2,116,500 sq. ft.

(2,151,00 - 1,375,128 = 775,872)

There would still be 775,872 sq. ft. left to be transferred from the landmark site.

Instead of a 55 storey 1.9 million sq. ft. building floating above an existing terminal building on a site

340'4" x 394'4" = 134,202'33"

it was proposed to erect a building considerably larger on a site (43,311 sq. ft.) that was less than a third of the size of the originally intended site. Originally, the Breuer building was to have 1.9 million sq. ft. Later, this figure was increased to 2.1 million, i.e. the building on the smaller

Biltmore site was to have approximately the same amount of space. To the north, south and east, the site was bounded by relatively narrow streets and to the west by Madison Avenue, the narrowest of north-south avenues.

On December 4, 1969, the Zoning Resolution was amended to meet the needs of the Grand Central situation. Section 74-79 enabled distribution of surplus development rights from above a privately owned landmark provided that

- the lots were adjacent to one another,
- they were in the same ownership.

The definition of adjacency was expanded to mean in the case of lots located in highest bulk commercial districts:[12]

> A lot contiguous or one which is across a street and opposite to another lot or lots which, except for the intervention of streets or street intersections, form a series extending to the lot occupied by the landmark building. All such lots were to be in the same ownership.

As a condition of permitting such transfer of development rights, the Commission was to make the following findings:[13]

- That the permitted transfer of floor area or variations in the front, height and setback regulations would not unduly increase the bulk of any new development, density of population, or intensity of use in any block to the detriment of the occupants of buildings on the block or nearby blocks, and
- that a program for continuing maintenance would result in the preservation of the landmark.

The legislative amendments were framed to meet the specific requirements of the Grand Central situation.

The concept, however, had significant potential for application in other situations. It will be recalled that a maximum FAR of 18 was achievable only where sufficiently large sites could be assembled to provide plazas that would earn 3 FAR points without, at the same time, reducing the standard tower floor size to uneconomic dimensions. These conditions could be more easily met in the Midtown area than in Lower Manhattan. In the past in Lower Manhattan, many high density and high coverage office buildings had been built on small sites. Consequently, potentially achievable density differentials were in general much lower than in Midtown. Indeed, in many cases, replacement of a building on a site would have resulted in:

- a structure with less floor space than in the structure that was being replaced. The Equitable Building at 120 Broadway is a case in point. Chase Manhattan had been able to achieve a satisfactory density differential prior to the introduction of FAR ceilings;
- through utilization of the 25% coverage provision that allowed towers to rise to any height. In the case of the U.S. Steel Building, built after the introduction of FAR ceilings, a satisfactory density differential could only be achieved through pooling of adjacent sites, one contain-

ing the Singer Tower and the others, whose development potential had been "sterilized" not only by the Singer Tower to the north, but also by the towering Equitable Building to the east, thus producing low rise structures. Pooling made the averaging out of FARs possible. While the FAR for the total area was still quite high, a satisfactory intensity-of-use differential could be achieved because of the functional obsolescence of the Singer Building and the high rents that a modern structure could command at such a key location.

At another prime location, at 1 Broadway at the foot of Broadway, the existing 15 storey structure's FAR was already close to the maximum achievable. Prospects to assemble a larger site were dim and even so, the maximum FAR could only have been 18. Based on the concept that had evolved earlier at Grand Central, the CPC advanced an amendment that would enable the United States Lines, Inc. to put up a 50 storey building with an FAR of approximately 30, thus achieving a significant density differential.[14]

The purpose of the amendment was to allow the transfer of development rights from lots occupied by publicly owned landmark buildings as had recently been permitted for privately owned landmarks. As in the case of the transfer of development rights from privately owned landmarks, the transfer was to be subject to the grant of a Special Permit by the

CPC and the Board of Estimate. Before granting a permit, the CPC would have to find that the permitted transfer of floor area or variations on the front, height and setback regulations would not unduly increase the bulk of any new development, the density of population or intensity of use in any block, to the detriment of the occupants of buildings on the block or nearby blocks, and that a program for continuing maintenance would result in the preservation of the landmark. In addition, in the case of publicly owned buildings, the transfer would be contingent on the provision by the applicant of a major improvement of the public pedestrian circulation or transportation system in the area.

A CPC spokesman admitted that the only specific plan under consideration involving the amendment was that for 1 Broadway. Under it, excess air rights atop the nearby United States Custom House were to be transferred across Bowling Green to the site of the proposed skyscraper. In return, the builder was to make "a major improvement" to pedestrian circulation and to the underground access and corridors to the adjacent Bowling Green Subway Station. Moreover, the company would be required to contribute to a fund or otherwise take a direct part in preserving the massive old Custom House, a designated landmark to be vacated when the Federal Government moved its offices to the World Trade Center.

Planning Commissioner Spatt, in dissenting, asked whether the city was gaining anything by giving away over $10,000,000 (780,000 square feet) of space in return for improved underground access and corridors to the Bowling Green Subway Station and a contribution to a fund to maintain the landmark. Spatt said the selling of air rights should be treated the same way as city owned land:[15]

> The usual procedure is for public auction with competitive bidding. Yet informal city negotiations have been going on concerning the transfer of the air rights to the United States Lines. Will the discretionary power enable the Planning Commission to choose one developer over another because of some vague better public improvement? ...Today's approval opens up a a Pandora's Box. Not only will government be heating up an already speculative real estate market ...but also it will be setting a poor precedent.

She continued:

> Selling and transfer of air rights from a public landmark to solve the city's fiscal problems is a warping of the zoning resolution. It is the very thing warned against by the National Commission on Urban Ploblems. If we sell the air rights over the Custom House, the first time, what will be next? The Public Library on 42nd Street? And the museums?,..The United States Lines is just across the park; but we already have a responsible request to transfer other air rights 500 to 600 ft. away. What about historic districts? Shall we permit owners of buildings to transfer their air rights out of the district and to where?

The achievable magnitude of density is enormous in the case of certain landmarks. For example, the excess development rights above the Custom House (789,800 sq. ft.) equal the floor area of the 60 storey Woolworth Building, while the

Public Library had 2½ million sq. ft. of surplus development rights. A Commission spokesman said that the air rights over the Public Library might indeed be transferred in some future project.[16] Donald H. Elliott held the zoning plan:[17]

> ...a practical and imaginative way to get good development, preserve a landmark, and improve the subway and pedestrian movement in this key part of the city.

The relaxation of zoning by the Planning Commission gave the impetus to the leasing of air rights over all types of public buildings. Under another program, the city's Real Estate Commissioner, Ira Duchan was beginning to lease air rights atop city owned structures to developers planning construction on adjacent sites. Under the provisions of Article 1, Ch. 2, paragraph 12 - 10 (1971) of the Zoning Resolution, a developer might increase the authorized floor area on the project site by obtaining a long term lease on an underimproved or vacant adjacent site, designating both that site and the project site as a single "zoning lot," and shifting the unused floor area from the former to the latter. These leasings were not subject to any special permit.

The first such leasing was arranged with the developer Samuel Rudin and Company. It involved a construction project at Madison Avenue and 26th Street.[18] 100,000 sq. ft. of unused air rights over the ornate three-storey Appellate

Division Court House, a stone-faced structure with corinthian columns and rooftop statuary on the west side of Madison Avenue at 25th Street, were to be transferred to a site on the south east corner of 26th Street and Madison Avenue.

With the air rights leased from the city, the developer was able to increase the size of the proposed structure by nearly one quarter -- from 420,000 to 520,000 square feet. The Madison Avenue development rights transfer took advantage of a statue that allowed the city to lease municipally owned structures for up to 99 years to the highest bidder. There were several legal complications. First the city turned over the court house premise including building and air rights, to the developer for 75 years. In a second lease, the developer subleased the building back to the city, with full control of it, while retaining 100,000 square feet of air rights. Over the 75 year period, the developer was to pay a total of $3.45 million for the rights, first paying $35,000 a year and eventually $50,000 a year, averaging 46 cents a square foot. Office space in the area rents for $7 per square foot and up.

Commenting on the two-fold benefits to the city's real estate, Commissioner Duchan said:[19]

> We get rental income for our air rights and we add real estate tax revenue because of the additional size of the developer's building, which is fully taxable.

Again, one must however ask to what extent was the possibility of such development rights transfers taken into account at the time of the Comprehensive Redistricting in 1960. In determining the district's overall densities, the planners surely did not anticipate that such air space transfers by sale or lease from public buildings could become a generally applied strategy. Mr. Duchan foresees many more air rights transactions throughout the city, through leasing of the unused air rights over police stations, firehouses and schools, where adjacent sites are ripe for development. To what extent will the carefully conceived density and intensity of activity allocations underlying the original mapping be thrown out of kilter? True, the ornate three storey Appellate Division Court House had only a relatively low FAR, but nevertheless, its intensity of use is probably at least equivalent to that of a structure with the district's prevailing high FAR. Court Houses often generate large amounts of traffic. There is a constant coming and going of attorneys, lawyers, defendants, plaintiffs. Typical, also, are the clusters of excitedly gesticulating persons crowding the sidewalks. Often there will be an endless stream of taxis and private cars discharging and

picking up passengers at the curbside. Then, of course, from time to time, special security precautions will have to be taken, which will further burden the area's infrastructure. Similar considerations should be taken into account when transfer of development rights from police stations, firehouses and schools is contemplated.

Firehouses, with their large ground level areas for parking firefighting equipment, usually have quite low FARs, but if the unused FAR is translated into high-intensity use right next door or just across the street, over and above the as-of-right zoning lot allowables, then the efficient operations of the firehouse may be seriously impaired. Legally as well as often illegally parked police department vehicles often block entire streets. This is a very real indication of the great difficulties encountered in running an efficient police operation in the inner city. Transferring "unused" development rights might well compound these difficulties.

How is one supposed to reconcile the fact that (i) transfers of development rights between holdings in the same ownership and (ii) transfers of development rights from publicly owned landmarks to privately owned sites by sale should be subject to a Special Permit from the Planning Commission, while transfers by means of leases should not be reviewed and approved by the Planning Commission? The

circumstances in terms of impact on the city are surely similar.

And if the transfer of development rights from a smaller and relatively inactive office building, i.e. the Custom House, warrants a major circulation improvement, then why would not, by the same token, such an improvement be warranted in the case of a development rights transfer away from the Court House, a building of similar size, yet in contra-distinction to the Custom House an intensively utilized building?

While the amount of square feet transferred from the Court House was only 100,000 square feet, the precedent was set for transfer of much greater amounts without Special Permit through the leasing device. For instance, what was to prevent throwing the 2½ million square feet of air rights available over the New York Public Library at Fifth Avenue and 42nd Street, onto the market? According to one member of the CPC, this leasing is accomplished without referring the matter to the Planning Commission.

This indicates that approval of such leasehold transfers is subject to administrative discretion. This makes it all the more imperative to establish a hard and fast set of criteria with which to administer such leasehold transferrals.

What effect will such transferrals have on the real estate market? Consider a situation in which a developer is

assembling a site for an office building. Instead of rounding off his parcel by acquiring an adjacent lot at the going market rate, he decides to take advantage of a city offer to lease transferable development rights at more advantageous terms. In this manner, the city can influence to a really considerable degree the workings of the real estate market. This power may be put to use to break the controlling grip of hold-outs that drive prices up and make assemblages impossible or extremely expensive. In this manner, the city could positively influence development.

However, any temptation to bargain away environmental standards must be overcome. Operating criteria should be established to guide administrative discretion, or, alternately, an as-of-right applicable set of rules may be established.

In June 1971, a group of investors headed by Henry B. Helmsley, president of Helmsley Spear Inc., bought the Tudor City development for $36 million.[20] Located between First and Second Avenues from 40th Street to 43rd Street, it was built between 1928 and 1931 and housed 2,800 families in ten buildings, some of which were 32 storeys high. One of Tudor City's more delightful features were two small private parks each about 100 feet by 230 feet on either side of 42nd Street west of First Avenue.

Harry Helmsley said he couldn't afford to keep a park: "I cannot afford to buy a park and pay taxes on it." In October 1971, Helmsley said there would be a decision "in a few months" on the future development of Tudor City. It might include using the parks as apartment house sites, he said, or the parks might be left untouched and new buildings constructed spanning but not blocking 42nd Street. "We are certainly exploring all possibilities," Helmsley said.[21]

Peter Hellman writing in New York Magazine, placed Harry Helmsley at the top of a list of the 10 most powerful people in real estate in New York City in 1972.[22] What Helmsley could not do in 1972, Peter Hellman wrote, was to build residential towers in the two private parks. Helmsley was "checkmated" by Jaquelin Robertson, director of the Mayor's Office of Midtown Planning, until December 1, 1972, second on Hellman's list, who, he said, dreamed up some exotic alternatives to building on the parks.

On December 7, 1972, the Board of Estimate approved a zoning amendment creating a special park district over the two small parks, allowing the developer to transfer or sell to another builder the unused zoning rights over the parks within the area bounded by Eighth Avenue and Third Avenue and 40th and 59th Streets. At the same time, the parks would become public.[23]

The 1960 Zoning Code created a problem in that the lowering of densities that could be achieved, made it difficult to replace obsolete high coverage high density buildings. In many instances, this was an intended effect of concern by real estate interests. Such buildings were ensured a prolonged life. The density ceiling made it impossible or difficult for such structures to be replaced by structures generating more rents. In some instances, however, no amount of modernization could make some of the older structures a viable economic proposition. At the same time, redevelopment of a site containing such a structure was not sufficiently profitable at lower densities than those existing, even if much higher rents were charged for the more modern space. Development rights transfers provided a way to replace very large obsolete buildings in that reattached development rights from an adjacent or nearby site created the needed increase in density to warrant demolition. It was used in this context to replace the Singer Building and thus make the United States Steel Building possible. In this instance, development rights were transferred across a street. The availability of the tool considerably broadens redevelopment options where old but large buildings are involved.

Although used first in this context, the device was primarily promoted as a way with which to protect low density landmark structures situated within districts mapped at high densities by the reattaching of surplus development rights to adjacent or nearby sites.

Although the concept of development rights transfers is an intriguing one, a caveat is in order. When the district density levels were established, the impact of density transfers on district densities was not anticipated and consequently had not been taken into account. It was commonly understood that allowed district densities would not be attained because, in many cases, the difference in attainable densities would not be high enough to provide a stimulus to redevelop. It was also generally expected that many lower density public and private landmark buildings would be retained and that this would contribute to lowering the district's average density. As a consequence of the development and application of the technique, area densities may be raised beyond anticipated and desirable thresholds. Moreover, distribution of surplus density to neighboring or nearby sites could usually only be achieved if there was some concomitant relaxation of envelope controls, such as increased coverage and exceptions to setback rules, to accommodate the increased density.

Transfers of development rights also posed a potential threat to incentive bonus systems in that they became an alternative way for the developer to achieve desirable density differentials. In this manner, for instance, the developer would be relieved of the necessity to assemble a large site to become eligible for the plaza bonus needed to get the necessary density to warrant redevelopment; or alternately, to provide other amenities that might be considered onerous by the developer.

Development rights transfers, in competition with incentive bonus systems, might then lead to increases in densities without any concurrent compensating amenities, such as increased open space as in the case of the plaza bonus. Whenever, for instance, it is a purpose of the incentive bonus system to discourage the redevelopment of small sites, this effect could be cancelled out by density transfers.

Chapter 17

The Special South Street Seaport District: Orchestrating Urban Renewal, Incentive Zoning, Development Rights Transfers and Sales To Achieve a Seaport Museum

The chapter will shed light on the potential of synthesizing a variety of techniques including urban renewal, incentive zoning and density transfers.

On March 27, 1968, New York City's City Planning Commission disclosed plans to apply for the first time full scale urban renewal that was to be keyed to the preservation, restoration and rehabilitation of landmarks.[1] The plans called for transforming an 11 block, 38 acre tract of the Fulton Fish Market and surrounding property immediately to the south of Brooklyn Bridge, into an "Old New York" neighborhood, of museums, restored historical buildings and apartment houses. The boundaries of the urban renewal area were to be Water Street north from John Street to Fulton Street, Pearl Street northwest to Dover Street, Dover Street east to the pierhead line of the East River, the pierhead line south to John Street, and John Street west to Water Street. A seaport museum is planned for the area. Ships

that visited New York in the early 19th Century and which are still afloat, are to be brought to South Street from all over the world. These are to include the only known surviving wooden square rigged American merchant ship -- the Charles Cooper -- which would have to be towed from the Falkland Islands; the Wavertree, an iron sailing ship's hulk; a paddle-wheel steamer, the Gloucester fishing schooner Caviar, and the first Ambrose light-ship. These vessels are to be moored permanently for inspection by the public at the foot of Fulton Street.

The CPC, seeking to move quickly on the project, set April 17, 1968, for a public hearing on designating the proposed site for urban renewal. Donald H. Elliott, chairman of the Planning Commission, emphasized that the city's move for urban renewal should quickly put the restoration into action. The Planning Commission's executive director, Richard H. Buford, foresaw the possibility that the actual rehabilitation of historic buildings might begin within a year.[2]

In addition to the fish market, the area includes a variety of old houses and commercial structures, and several blocks of dilapidated warehouse and commercial buildings. At the time of the proposal, the Fulton Fish Market occupied a key waterfront parcel, the block between Fulton Street and Beekman Street. It was scheduled to be relocated to the Hunts Point Section of the Bronx.

The prospective sponsor for the area, the South Street Seaport, Inc., of which Peter Stanford is president, Jakob Isbrandtsen, chairman, and Robert J. Tarr, secretary, had been working on proposals for a maritime museum.

Through the Summer of 1968, the Housing and Development Administration's Office of Planning, Design and Research was engaged in developing a concept plan for the urban renewal area. It envisaged a reconstructed historical building on the present site of the Fish market, a multiblock pedestrian precinct, a major air rights office structure over Pearl Street in conjunction with an elevated plaza and tourist center. Rehabilitated buildings principally along the water front would have maritime displays, shops and restaurants. Characteristic for the area were the wedge shaped slips, widening towards the water front, e.g. Peck Slip, where in former times vessels had been repaired. Although run down, the area did contain some noted eating places, Sweets Restaurant in Schermerhorn Row and Sloppy Louie's just around the corner on South Street, frequented each noon by throngs of executives and white collar workers employed in the financial district and in the nearby civic center area. Schermerhorn Row on the south side of Fulton, a rare survival of early nineteenth century Federal style architecture, is the core of the South Street Seaport, the non-profit, privately financed state and city-sponsored

project to keep and restore one of the historic sites of the city's sailing age. It was predicted by Mr. Elliott and Mr. Buford that the Seaport Museum and the restored area would attract as many as three million visitors a year.

Chairman Elliott pointed out that there would be no grants of public funds to the renewal area. Rather, he said, the city would use its own power of eminent domain and its money to condemn the needed land. The money outlayed by the city was to be refunded in full by private sponsors.

Although the city was moving at full speed to have the area designated as an urban renewal area, commercial builders were also attracted to the area.

The non-profit sponsors, the South Street Seaport, Inc., contended that two skyscraper builders, the realty developers John P. McGrath and Sol G. Atlas, were imperilling their project by buying up properties in the block containing historic Schermerhorn Row.

Peter Stanford said that Atlas McGrath was completing negotiations for most of the remainder of the block:

> We had been negotiating with the owners for months at a level of $70 per sq. ft. We seemed near a conclusion so we thought.

Atlas McGrath were proceeding with their acquisitions even though the Landmarks Preservation Commission had recently

designated Schermerhorn Row as a landmark. They were offering $100 per sq. ft. According to Mr. Stanford, they were operating under a cloak of secrecy:[4]

> ...with the hope that the large Atlas McGrath investment would influence the city to scrap or sharply alter the restoration plan.

Asked about their activities in the area, Mr. McGrath, a former City Corporation Counsel, said that they "haven't done anything illegal, anything I don't have a perfect right to do." He continued:

> I am under no obligation to make any statement at this time. I don't owe anything to the seaport museum. I am a citizen in a free country, free to conduct myself in any way that is legal.

The seaport group, he said, should be "less emotional and more practical."

Richard H. Buford, executive director of the CPC, said that he had told Mr. McGrath that the Lindsay Administration was "committed to the South Street seaport plan" but that it was not inconceivable that Mr. McGrath could play a role in the urban renewal project.[5]

The Urban Renewal Plan had been adopted on October 28, 1968 by the Board of Estimate. On November 13, the CPC approved a recent action of the Landmarks Preservation Commission in designating historic structures within the renewal area -- Schermerhorn Row -- as landmarks. Final approval of the designation is required by the Board of

Estimate. On December 19, 1968, the Board of Estimate unanimously upheld the previous designation which had been ratified by the CPC and conferred landmark status on the 18 houses of Schermerhorn Row.[6] In doing so, it rejected an argument of John P. McGrath that:

> ...this prime property, close to Wall Street, should be used for high rise commercial buildings to serve the city's financial community.

Mr. McGrath also gave his views in a letter in which he stated that he and Sol G. Atlas, as developers, had acquired most of the Schermerhorn Row property and intended to erect their own office building on the plot. The erection of commercial office buildings on the site would produce real estate taxes of $5 million a year in addition to "a large volume of sales taxes, annual use and occupancy taxes, sewer and water taxes and other revenue."

The Board's action assured the preservation of Schermerhorn Row, at least for the time being. Just prior to the Board of Estimate's meeting, the New York Times published an editorial calling on the Board not to withhold the landmark ratification from which the following quote is taken:[7]

> Mr. McGrath, a former corporation counsel for the City of New York, has excellent political connections. He says that he is not used to losing. A great many New Yorkers want him to lose this one.
> The real issue involved here is whether the Board of Estimate, by withholding landmark ratification, is going to scrap the city's own exemplary plans to

> please two men who seem bent on personal gain irrespective of civic cost. To permit this would be an unconscionable act of cynicism by responsible public officials.

It was up to the sponsors of the South Street Seaport Museum to demonstrate that it was economically feasible to preserve Schermerhorn Row as part of the overall plan. Approximately 1½ years later, on May 25, 1970, the Housing and Development Administration announced that the city had negotiated a complex land transaction in order to accomplish the funding and maintenance of the South Street Seaport Museum. In the interim period, Sol Atlas and J. P. McGrath had aligned themselves with Jakob Isbrandtsen who, as we recall, was the Chairman of the South Street Seaport, Inc.

Under the agreement, an Atlas-McGrath-Isbrandtsen joint venture would be permitted to construct a two million square foot office building on block 74W, i.e. on the site next to Schermerhorn Row. As the block's C4-9 zoning would not permit a building of such excessive size, it would be necessary to transfer development rights from abutting sites to build the structure.

In consideration for the transfer of sufficient development rights to build the structure, the joint venture was to fund the Seaport Museum.[8]

> Its funding will take the form of an initial cash payment, to be used by the Museum to reduce its current indebtedness and a personal guarantee by Jakob Isbrandtsen that the Museum will be placed in sufficient funds to acquire, free and clear, all of blocks 96 and 97 and to undertake initial restoration. The guarantee will be secured by Mr. Isbrandtsen's half interest in the office building.
>
> On the basis of the guarantee, the Museum will effectively receive all income from Mr. Isbrandtsen's half interest during the five years succeeding the City's approval of the project. At the end of the five year period, Mr. Isbrandtsen will personally make up the difference between the Museum's acquisition resources and all costs, including indebtedness, of acquiring blocks 96 and 97. A surplus of $4 million cash will be left with the Museum.
>
> In order to permit Mr. Isbrandtsen to recoup as much of his contribution as possible, the City will permit his sale of the streets, or their development rights, to be closed in the Seaport area to the sponsors of abutting projects. The city will seek to maximize Mr. Isbrandtsen's return by allowing him as much street as possible. As of now, his second phase street sale will include Front and Beekman Streets. It may be necessary to add a portion or all of Peck Slip at a later date.

The question that had to be subsequently resolved was: How was Mr. Isbrandtsen to be enabled to profitably dispose of the development rights that he had acquired through the street closings, i.e. where could the surplus development rights be reattached? To the north-west were the recently completed Southbridge Towers, an urban renewal area, formerly known as Brooklyn Bridge Southwest. A few irregularly shaped and small sites that seemed hardly conducive to redevelopment were all that was left.

Key components of the concept plan prepared by the Office of Planning, Design and Research for the renewal area were bridging Water and Pearl Streets with an air rights plaza and office structure. The plaza was to be in the path of Fulton Street and was to connect the two urban renewal areas. It was also to be connected with the proposed Second Avenue subway:

> 2(e) Following the development of the proposed Second Avenue subway, connections to the concourse level should be considered in the Water Street area. To facilitate a modern and efficient circulation system in which pedestrian and vehicular traffic are separated vertically, connection is to be studied to the pedestrian system in Brooklyn Bridge Southwest Urban Renewal Area.

On July 14, 1970, a meeting was held to discuss the zoning lot configuration for an office building on a number of medium sized and smaller parcels bisected by Pearl Street. In attendance were Norman Marcus, legal counsel of the City Planning Department, representatives of the Office of Lower Manhattan Development, Arthur Wrubel, Michael Pittas and three representatives of the Housing and Development Administration's Office of Planning, Design and Research led by John Boogaerts, Jr.[9]

Section 74-741 of the Zoning Resolution states that as a condition for consideration by the Commission of any application under the provisions of Section 74-74 (Commercial Developments Extending into more than one block), the

following minimum requirements shall be satisfied:

> The total lot area of the zoning lots comprising such site shall be not less than 60,000 sq. ft. and each zoning lot shall either occupy an entire block or contain a lot area of at least 20,000 sq. ft.

2 B was the largest parcel with 42,198 sq. ft. Parcel 2 Bb had 6,051 sq. ft. The total lot area lacked several thousand square feet to make it eligible as a recipient for transferred development rights. 60,000 sq. ft. was the minimum. It was decided to demap a pedestrian street, Cliff Street. By adding it to Parcel 2 B the two zoning lots would become eligible for zoning lot computation under Section 74-741(b).

Section 74-742 permits 40% tower coverage of the site. Section 74-742(c) permits "that where a tower is permitted to occupy more than 40% of the lot area of the zoning lot on which it is located, at least 50% of the entire site will be developed either as:

(1) Plaza or as open area designed for public use and enjoyment contiguous to a plaza and at no greater elevation than the plaza to which it is contiguous.

(2) In the case of an Urban Renewal Project, as landmark and historic buildings plus public spaces, public amenities and public uses that are related to them.

According to Scheme II percentage coverage of total site, 56% of this site will be developed as plaza and adjoining

open space if the definition of zoning lot were to be expanded to include planes that are contiguous vertically if not horizontally. This would facilitate pedestrian circulation on continuous planes of different levels. Mr. Marcus questioned "site versus zoning lot" definitions in the Zoning Resolution and proposed that a change in the zoning lot definition be drafted.

It was decided to propose that the area of the zoning lot located in the demapped portion of the street should be used for bonuses but should not have attributable floor area, i.e. no floor area was to be permitted from Parcels 2 Ba and 2 Bc, the demapped portions of Pearl Street.

The meeting had prepared the legal basis by which development rights of the closed streets could be transferred out of the urban renewal area. Expanding the definition of zoning lot and demapping had created a zoning lot in excess of 60,000 sq. ft. In addition the demapped portions above Pearl Street were to be eligible for bonuses.

Based on the agreement between the City and Isbrandtsen a consortium of five banks had agreed to lend him about $12 million against the future sale of other air rights over the three storey and four storey buildings and closed streets. When the bottom fell out of the commercial real estate market, the development rights lost value and

Mr. Isbrandtsen's property was in danger of reverting to the mortgagors.

The Office of Lower Manhattan Planning and Development then began to investigate the possibility of creating a Special South Street Seaport District.[10] The general goals of the proposed special district included the goal of implementing the provisions of the Brooklyn Bridge Southwest Urban Renewal. A key purpose was to preserve and encourage the restoration of the Schermenhorn Row Landmark Buildings. Other purposes included:

- To encourage the preservation, restoration and, in certain cases, redevelopment of real property and buildings thereon into a South Street Seaport environmental museum which was to have associated cultural, recreational and retail activities;
- to assure the use of the area as an area of small historic and restored buildings, open to the waterfront, having a high proportion of public spaces and amenities which would serve as an urban retreat from the neighboring commercial office buildings and activity of Lower Manhattan.

As a means of accomplishing these purposes, the Special District was to permit the transfer and disposition of air rights from designated zoning lots to other lots in the area designated for intensive commercial development.

A number of important new definitions were introduced to the Zoning Resolution. The amendment distinguished between granting lots and receiving lots. Granting lots were defined as zoning lots and closed streets identified on a Transfer District Map from which development rights might be transferred, either directly to receiving lots likewise identified or alternately, to a person for subsequent disposition to a receiving lot.

A "person" could be either an individual, a corporation or a partnership, trust, firm, organization, other association or any combination thereof.

Only development rights in excess of

- an amount equal to 5 times the lot area of each of such zoning lots OR
- the total floor area of all existing buildings on any such zoning lot, whichever was greater, might be so conveyed, except where streets were designated as granting lots, in which case no limitations were imposed other than that of the district's ceiling.

The two largest receiving lots lay in the East River between the bulkhead and Pierhead lines at the foot of

Wall Street. In fact, over 50% of the Special District was located in areas yet to be reclaimed from the East River. But only that portion closest to Wall Street had been designated as a receiving lot.

Another area within the district with neither a granting nor a receiving designation was three blocks controlled by the City under its Renewal Powers, immediately adjacent to the contiguous cluster of granting lots centered around Schermerhorn Row.

All or any portion of the development rights transferred from a granting lot might be added to the floor area of all or any one of the receiving lots over 30,000 sq. ft. in size, in an amount not to exceed the ratio of 10 sq. ft. of development rights in each sq. ft. of lot area of such receiving lot.

In the case of receiving lots with less than 30,000 sq. ft., however, the aggregate increase in floor area from such transfers was not to exceed a floor area ratio of 21.6. Nevertheless, development rights in excess of an aggregate FAR of 21.6 transferred to such lots might be converted into increased tower coverage so that the maximum percent of lot area which may be occupied by a tower shall be the sum of 40 percent plus one-half of one percent for every .1 by which the increased floor area attributed to the transfer of development rights for such development would exceed

a floor area ratio of 21.6, provided that in no event tower coverage may exceed 55 percent on a receiving lot. In one event was the floor area ratio of a residential building or portion thereof to exceed 12.00.

Under the proposal a kind of a commodity exchange in air rights would be created. Development rights could be acquired and held for future sale and reattachment. The success of the idea would be in part dependent on whether the financial community could be persuaded to buy "futures". The proposal was heard by the CPC at a meeting held on April 26, 1972. Action on the proposal by the Board of Estimate is still pending, but the idea was picked up in midtown as a way to save the two small parks of Tudor City. The arrangement would have enabled Isbrandtsen to get funds by selling his development rights above Schermerhorn Row. Participating banks hoped that an improved real estate market would subsequently push the value of the air rights over the seaport up to $6 million, or $8 million.[11]

This chapter has described a clash between the conflicting goals of the management of the spatial environment to greater public advantage and the management of the marketing and production of office space, and has shown how it was proposed to resolve the conflict through a combination of techniques.

Chapter 18

Incremental Adaptations to the 1960 Code Since Its Inception: Incentive Zoning's Role

This chapter will show how, over a period of a decade, as the demand for both office and residential space continued to be strong, pressures were brought to bear for changes to be made to the Zoning Resolution, which would allow for a higher intensity-of-use to be achieved on a widened array of sites. It will show how manipulation of density incentive award rates and amenity schedules were soon seen by the real estate community as a principal means to achieve desired intensities-of-use. By the same token, it will be seen how, through withholding of bonuses, development may be deterred. The chapter commences with some early reactions to the code as it is put to use.

In 1962, a spokesman for the CPC remarked:[1]

> We felt from the beginning that a monumental undertaking like the new code would require many revisions, and that many of them would not be foreseen and acted upon until architects began putting the Code into use.

Richard Roth Sr., the architect, objected to the esthetic limitations imposed by the new code:[2]

> We will have a series of towers all looking like the Washington Monument. Under the new code, a builder is penalized if he attempts to attach an unusual facade to a building's curtain wall. If the facade projects even as much as a foot over the building line, he is forced to give up interior footage.

George D. Brown, partner in the architectural firm of Brown and Guenther, asked James Felt, the CPC chairman, to back a change in the code to permit the use of ground floor space in apartment houses for laundry rooms, baby carriage storerooms, meeting rooms and other non-dwelling facilities.[3] He said the zoning code would force a builder who installed non-residential areas on the ground floor in an apartment building, to give up an entire residential floor, while if he installed such facilities in cellars or sub-cellars, he would not be compelled to give up rentable space. A cellar is defined as a space having more than half its height below the legal curb. Calling for the abolition of cellars for such uses on the grounds that they were difficult for housewives to enter and leave, and that they had inadequate natural light and air, he suggested that:

> ...encouraging the provision of more bright and cheerful community spaces without sacrificing rentable area in an apartment house seems a sound principle.

This would also enable the builder to avail himself of the arcade bonus, an option not readily available with ground floor apartments.

At a meeting held in April 1965, in the offices of the CPC between the new chairman of the Commission, William Ballard, and Richard Roth, Roth criticized further aspects of the new code.[4] He said the combination of open space requirements and other regulations under the new law tended to produce a new stereotype in place of the old wedding cake stereotype, namely sheer towers rising from regular setbacks on the building lots. The law should give the architect greater freedom, he said. Within reason, he argued, the architect should be allowed to place building towers on any part of the lot that he saw fit. And with reasonable controls he should be freed from the sky exposure plane and be governed only by the allowed floor area ratio. "I might agree with that," Mr. Ballard said, "but we might disagree on what is within reason and what are reasonable controls."

Mr. Roth also said that although the zoning law sought to encourage construction of arcades, few were being built. The bonus in floor area of three feet for every foot of arcade area is not great enough to be a stimulus, he said. In addition, he held unreasonable for the builder to be penalized in floor space for terraces that are partly enclosed, while the area of exposed terraces is not counted in computing allowed floor area ratios.

Perry Coke Smith, managing partner of Smith, Smith, Haines, Lundberg and Waehler, formerly Voorhees, Walker, Smith and Smith that as consultants to the Planning Commission had made the study leading to the new zoning law, supported Mr. Roth's contentions. He said that the fewer geometric restrictions placed on an architect, the better.[5]

> These architects who are going to design good buildings are going to design them anyway and those who are going to design bad ones are going to do it with or without restrictions.

The institution of the floor area ratio as the primary controlling factor was the most progressive part of the new law, so far as the architect is concerned, Smith said. The greatest good to the public, he said, will come from the open space requirement and the bonus rule that declares:

> Give us a plaza we can walk on, Mr. Builder, and we'll give you more space to rent.

On April 14, 1965, the CPC approved an amendment to permit greater diversity in the design of office towers.[6] The Commission's action would allow buildings to occupy a limited area within 50 feet of the street line on a street less than 70 feet wide or within 40 feet of the street line on a wide street, regardless of the buildings or their positions with respect to the curb line. The first project to benefit from the change that was approved by the Board of Estimate was an office building for the New York Telephone Company in the Murray Hill area at 233 East 37th Street in

the middle of the block between Second and Third Avenues. As the building site extended through to 38th Street, there were to be landscaped plazas 50 feet deep and 150 feet wide on both streets. The tower was to be raised on columns and under it was to be a street to street arcade. The New York Telephone Company was one of the city's largest owners of real estate. With the new skyscraper the telephone company owned 21 buildings containing a total of approximately seven million square feet of space in Manhattan alone (62 in the five boroughs).

The change in the law that had first been proposed by R. A. Jacobs, partner of the architectural firm of Kahn and Jacobs to the Department of Buildings in November 1964, enabled the building to have, instead of 18,000 square feet of floor area, 20,000 sq. ft. of floor area.[7] When a building was to be erected on a narrow street (less than 75 feet wide, as East 37th Street was), the zoning law required the tower's facade to be set back from the property line by a distance equal to one-third of the tower's width. The zoning law gave the architect the option of putting 1,875 sq. ft. of the tower's total floor area in front of an imaginary line 50 feet back from the property line. This projection under the revised zoning law could take any shape the architect desired, provided that no portion of the tower was closer than 15 feet to the property line. More generous

allowances were made for towers erected on wider streets.

By 1969, bonuses were introduced for Through Block Arcades. They were to be regulated by Special Permit issued by the CPC. For each square foot of through block arcade in commercial districts (FAR 10) 3 sq. ft. of floor area was permitted. In FAR 15 areas, 6 sq. ft. was permitted. Each application for a through block arcade was to meet the following criteria:

- Result in substantial improvement of pedestrian circulation;
- provide appropriate secondary commercial frontage along the through block arcade such as small shops and restaurants.

The effect of these additional bonusable covered open spaces was to make it easier to develop smaller sites at higher densities. While the 1 to 3 as-of-right arcade bonus still applied, some types of covered pedestrian space could achieve as much as 16 sq. ft. additional floor space for each sq. ft. of such space provided. Under Section 74-87 (Revised 4-16-70) the following increases were permitted:

Permitted Additional Floor Area Per Square Foot of Covered Pedestrian Space

Area with Air Conditioning and Heating Facility	Area without Air Conditioning and Heating Facility	
14	11	C5-3, C5-6, C6-7, C6-9, FAR 15
11	8	C5-2, C5-4, C6-4, C6-5, C6-8, FAR 10

But where a major necessary direct access from the covered pedestrian space to a subway station mezzanine or concourse is provided in the development and such connection is kept open to the general public for the same hours as the covered pedestrian space, an additional bonus of 2 square feet of floor area per square foot of covered pedestrian space might be permitted. In effect this meant that much of the space formerly eligible by right for the 1 to 3 arcade bonus, now became eligible by Special Permit for bonuses of 1 to 8 or 1 to 11, for the same type of space, and if provided with air conditioning and heating facility, of 1 to 11 and 1 to 14. (To this 2 sq. ft. could be added, if access was provided to a subway station.) Only that portion of the covered pedestrian space which was within 10 feet of a street line continued still to qualify only for the 1 to 3 arcade bonus.

Until the 1961 comprehensive zoning revision, wedding-cake skyscrapers were the general rule with a few significant exceptions, e.g. the Chase Manhattan Plaza, the Seagram Building and Lever House. These were designed to "fill the zoning envelope" by enclosing the maximum amount of space at each floor level, with setbacks, storey by storey at the higher levels, only to comply with the old zoning code's light angle requirements. The new code, with its incentives for including open space at street level, had from the build-

ing owner's standpoint the practical effect of making most profitable a sheer tower set well back from the curb to create a plaza. As a result, as Edward Sulzberger, president of the real estate firm Sulzberger Rolfe, Inc., pointed out, the zoning change did little more than substitute one design cliche for another.[8] "Aside from the different facade materials used in the towers, the buildings are practically interchangeable in design." He gave credit, however, to the architects of the towers that had come up with a number of imaginative approaches to the design of the plazas.

> Sunken plazas, landscaped plazas, shopping plazas, plazas with fountains and plazas that are illuminated at night, have all become part of the scene in our business districts. These spaces have created welcome vistas in a crowded city. And certainly the towers, rising from them, are a big improvement architecturally on the buildings that went up in the fifties.

Plaza associated problems, Mr. Sulzberger called attention to, were the difficulty of assembling a site for a new skyscraper. In assembling a building site, a developer must buy up almost an entire blockfront on an avenue in order to make his project feasible. This is because only a small percentage of the total site can be covered by the building proper. Midblock apartment buildings on side streets -- normally the most desirable of locations -- are generally impractical under the new zoning ordinances because they must be set too far back on the plot. The site coverage

limitation had resulted in even taller buildings. The typical Manhattan office skyscraper built in the fifties was between 30 and 40 storeys high. In the sixties, the average had become between 40 and 50 storeys. This resulted in increased rentals because of the greater unit cost that resulted when towers were stretched higher into the sky. This had been only partly offset by the development of new lightweight building materials that cut foundation and structural costs. In conclusion, in commenting on the overall effect of plazas on the local scene, Mr. Sulzberger thought it was time for a change. Perhaps new incentives might be written into the zoning code to encourage more variety of design in skyscrapers, he suggested and added:

> This could get away from the single note theme song of the sixties in Manhattan architecture.

In June 1970, James Felt, former chairman of the CPC and principal architect of the 1960 Zoning Resolution, called for a review of the Zoning Resolution.[9] He noted that the plaza and arcade regulations of the 1960 resolution had had "a most dramatic effect in the areas of the city's continuing and prodigious office building boom." In response to criticism that the recent development of Third Avenue and the Avenue of the Americas was "monotonous and sterile," he said that this was a matter of taste. With respect to the criticism that a planning opportunity had been missed, he

responded that this criticism was more valid, although a matter of hindsight. Felt urged that the plaza and arcade regulations should be improved. Moreover, he recommended the development of additional incentives, such as in the Special Theater district or direct subway access.

With the expanded use of incentive zoning, developers were complaining of being held up.

In 1970, a lawyer with many builder clients estimated that a routine application took six months to a year compared with four months to six months before the reorganization and expansion of planning functions under the Lindsay Administration after 1967. Previously, the lawyer said, it was also possible to get within three or four weeks a preliminary staff indication of what the Planning Commission's final disposition would be, information that was most useful to a client to whom time means money. In 1970 it took a good deal longer to get that preliminary indication.[10]

> You are now dealing with a whole group of staffs and substaffs. Sometimes, I don't know who gets into these things.

In 1970 a builder's proposal presented to the Commission for review might be reviewed by the technical controls staff, the urban design group, the transportation staff, the district planning office and the local community planning board.

Felt expressed considerable concern over the administration of incentive zoning:[11]

> The Planning Commission has taken some bold steps in incentive zoning. This is generally to the good, but there is one caution I would give. The approach appears to be very much on a negotiated rather than on a general basis. This gives a skillful negotiator an unfair advantage over a less sophisticated developer and should be avoided where possible.
>
> It would probably be better, for example, if the Commission could detach itself from the administration of incentive zoning. It would then have more freedom to prescribe incentives without evoking the suspicion and hostility it now does among builders.

He criticized the administration of zoning divided as it was between the Department of Buildings, the City Planning Commission and the Board of Standards and Appeals and called for a zoning administrator with a trained staff and adequate budget. He recollected that in an early stage of preparation of the 1960 zoning resolution, the appointment of a zoning administrator was proposed, but that the proposal had to be dropped as it became a roadblock to passage of the resolution.

It was James Felt's firm conviction that changes in mapping to a higher density classification were warranted and that, consequently, areas where changes were requested should be systematically reviewed by the CPC. In fact periodic reviews were essential, he contended in July 1970.[12]

Rexford E. Tompkins, chairman of the Real Estate Board of New York, argued that remappings to high density classifications were necessary because:

> the only major variable in new development is zoning ...construction costs, financing costs, operating expenses and taxes were not variable.

Further, there was a maximum price at which apartments could be marketed.

Under one zoning reform developers were seeking in 1970 an additional 20% bonus to be granted in R10 districts, bringing about a floor area ratio of 14.4. This was the maximum achievable density in the Lincoln Square District. In order to eliminate the possibility that this would merely increase land speculation and drive up the cost of land rather than encourage the construction of housing, it was proposed that the added bonus would only be provided where there were no change of ownership and that construction began within a specified time period, such as two years.[13]

Another proposal that was advanced by builders from time to time was to raise R6 zones to R8 -- a 100% increase in rooms per acre. Much of Brooklyn, Queens and the Bronx are mapped at such densities.[14]

Some builders are particularly anxious to get zoning changes so as to be able to go ahead with construction on sites they already hold. As many as a dozen vacant apartment sites in Manhattan are "ready to go." One informed source, it was reported in the New York Times, said that many sites had been purchased at a time when the Board of Standards and Appeals was more liberal in granting hardship variances for

higher density construction than the zoning allowed. A case in point was the Milstein building at Lincoln Square. Now the purchasers are "stuck with the land," he said. "They took a gamble and it didn't pay off."[15] On May 28, 1970, Milton Glass, chairman of the Board of Standards and Appeals, announced his resignation. Mr. Glass's term expired January 1, and sources in the Administration said he had wanted to see if he would be reappointed by the Mayor. Mr. Elliott and others were said to have urged Mr. Lindsay to refrain from making the reappointment.

Yet another plan calls for a raise of all residential districts by one density category across the board. According to Mr. Elliott, this particular proposal had been virtually ruled out. "That would have the effect of destroying a substantial amount of good housing," he said in an interview with Alan S. Oser, on what was roughly the 10th Anniversary of the Comprehensive Zoning Amendment.[16] He also made known that the CPC was planning to extend the use of special zoning districts, a device it had used to guide commercial development in specific districts. Mr. Elliott said that special zoning districts eventually would be proposed for other boroughs than Manhattan, in downtown Brooklyn, in the Jamaica area of Queens and on Fordham Road in the Bronx.

While developers contended that zoning changes would make the crucial difference between developing and not developing plots, the prevailing view among high Lindsay Administration officials was that zoning was not the critical factor. Rather they held that high construction and financing costs had pushed non-subsidized housing to price levels beyond the reach of most citizens and beyond the marketability of most areas. In January 1972, this belief was reiterated in a report released by the Department of City Planning, entitled "Infill Zoning":[17]

> Many developers have claimed recently that zoning was responsible for the slowdown in private residential construction in New York City. This is not the case.

In a typical new one-bedroom apartment in a Manhattan high rise building, the report cited, only $26 of the $185 increase could be attributed to increases in land cost. Costs resulting from construction and interest account for $101 of the increase.

On 20 August 1970, the Board of Estimate accepted a CPC recommendation to remap the midblocks between Park and Fifth Avenues from 86th to 96th Streets, to a R8 designation. This area was one of the two areas in Manhattan -- Murray Hill being the other one -- where 60 foot side streets were mapped at R10. Except for these two areas, R10 zoning was limited to avenues, creating north south "spines" of tall and bulky buildings, a pattern of high density "mountain ranges" along

the avenues and low density "valleys" on the side streets, a principle established in 1961.[18] The objective of the measure was to prevent high rise projects in the midblock areas of the cross streets between Fifth Avenue and Park Avenue. The Carnegie Hill Neighborhood Association, supported by Community Board No. 8, had urged the CPC to remap the midblocks from R10 to R8.

William J. Diamond, chairman of Community Board No. 8, said:[19]

> Unless the proposed rezoning application is granted, we can anticipate construction of additional gigantic structures and the demolition of physically sound five storey to seven storey buildings.

Peter Sharp, a developer, had planned to build a 42 storey structure between 88th and 89th Streets, midblock between Park and Madison Avenues. He subsequently scaled the size of the building down to 30 storeys, with a plaza and some town houses. Under the R8 zoning, the building could not be built half as high. Abraham Lindenbaum, attorney for Peter Sharp, succeeded in convincing the Planning Commission to exempt the block in question from the zoning change on the grounds that work on the project was already too far advanced.

But David Perlmutter of the Carnegie Hill Neighborhood Association told the Board that the one block exemption:[20]

> ...defeats the entire purpose of the rezoning. The entire neighborhood will be degraded by his monster building.

The Association went to court in an unsuccessful attempt to upset the exemption.

On September 17, 1970, the Board of Estimate, without comment for or against, adopted a series of changes in the city's zoning resolution, relating to the ways in which towers might be placed on their sites in the city's highest density residential districts. One of the city's top architect-planners said: "It isn't brutish architects or rapacious builders but the zoning ordinance that designs buildings."

"Any building is as much influenced by zoning as by architecture," said Raquel Ramati, whose studies led to the amendments, "zoning is the grammar in the language of architecture."[21]

In the view of Ellen Perry Berkeley writing in the November 1970 issue of Architectural Forum, what made the amendments significant was that they were not just the first attempt to make useable the open space surrounding towers, but that they were also the first attempt to consider a building's relationship to nearby buildings and streets.

The changes regarding 40% coverage towers

- established an uniform setback zone of 10 feet from a wide street and 15 feet from a narrow street, previously applied only to a tower with a base;
- abolished limits on the amount of floor area permitted within various distances of the street;
- allowed, by special permit, for a tower to be built up to the line provided the lot ran the entire width of the block along the avenue, an arcade was built, and a public open space of at least 4,500 sq. ft. (minimum dimension of 40 feet) was furnished on the site, and provided the change would "enhance the architectural relationship" of the building to its surroundings, and would "improve the relationship" of the open space to its surroundings and would not obstruct anyone's access to light and air.

"The builders had been pressing us, saying that the zoning was inflexible and it was," said Raquel Ramati. In the course of the study, the few architects who did most of the city's high density luxury housing were conferred with.

Richard Roth Jr. in agreeing that the new regulations were "excellent" on the right track, said no one suggests that the changes will make for more housing.[22] Samuel H. Lindenbaum, Jr. who represented the development community, in noting that developers would continue to build as they

did previously, said the only real incentive to development was to increase the floor area, thus spreading the cost of the land and the foundations.[23]

Ramati also studied the question of greater site coverage. "Some buildings have a floor area ratio of 20, but you don't feel it," she observed. Since the FAR would remain constant, greater coverage would mean larger floors, fewer storeys, an improved ratio of exterior surface to enclosed space, reduced construction time and reduced costs of operating. On sites less than 20,000 sq. ft., greater coverage from 50% to 70% which according to Raquel Ramati, results in an uneconomical floor size, would affect half of the vacant or "soft" sites. "But we're not pushing these changes now," Berkeley quotes Ramati as saying, "if it isn't economical to building 250 units, it isn't economical for 100."[24]

In the third week of January 1972, the CPC proposed special regulations for zoning lots in both R8 and R10 districts, so called "split lots."[25] Under the provisions, whenever a zoning lot was located partly within a R10 district and partly in a R8 district, a part of the R8 portion equal to up to one half the lot area in the R10 portion was to be governed by the provisions of R10 districts, which allow a maximum FAR inclusive of bonuses of 12.

The following conditions were attached:

- The entire zoning lot would have had to have been in single ownership since September 1, 1971.
- Not less than 75% of the total floor area permitted on the zoning lot was to be located on the R10 portion of the zoning lot.
- Not less than 20% of the lot area of the zoning lot was to be developed as a public open space in one location within a minimum width of 40 ft. at street level, and with planting, pedestrian walkways, sitting and/or play areas. Driveways were not to be permitted within such open space. Such public open space was to be eligible for a plaza bonus.
- The number of families to be relocated was to be no more than one fifth of the total number of dwelling units to be developed on the zoning lot.

Unique was that in order to build under the provisions of the proposed change, plans would have to be filed no later than 6 months after its effective date. Moreover, the benefits of the provisions were to lapse unless the foundations of the development were completed within 18 months of the effective date of the change. There were at the time 15 eligible sites on the East Side. Eleven of the sites were on Third and Second Avenues between 26th and

93rd Streets. A Commission spokesman, in making public a list of the affected Manhattan sites, said there was no definite information on the identity of the owners.[26] "For one thing," he said, "we don't care who the owners are."

Elliott in characterizing the proposed change as "significant but reasonably modest," estimated that the sites, which would provide 4,200 apartments if built under present rules, would provide 4,900 under the proposed changes. In noting that the East Side aspect might provide a windfall for current owners, he said then prevailing financing conditions made it impossible to build on the sites at then authorized densities, that some of them were totally vacant, and that it was desirable to build housing there.

The chairman of the Community Planning Board No. 8, William Diamond said he was "shocked to see the Planning Commission advocate piecemeal zoning that will richly reward a few selected property owners." The proposal was not adopted.

Further to the west on Park Avenue and on Fifth Avenue, the persistent though gradual pressure for redevelopment posed slightly different problems to those that had resulted in the split-lot zoning proposal for specific sites on or east of Third Avenue. An analysis of recent development activity indicates that because of the prime location, new construction is possible on smaller than average sites (less

than 10,000 square feet) and that assemblage activity reflects this pattern.[27] Excluding new construction, co-ops, landmarks, and buildings over 10 storeys, the Department of City Planning identified 17 sites capable of redevelopment within the next ten years.

At the corner of Park Avenue and 71st Street, a slender 30 storey co-operative apartment tower has recently been completed. The developers, in catering to an anticipated demand for the most luxurious of apartments, decided that each apartment should occupy an entire floor. Each apartment had nine rooms with 3,420 square feet of floor space -- the equivalent of two town house floors. With only one apartment per floor, the building's standard floor size could be accommodated on a site substantially less than 10,000 square feet in size, while at the same time taking advantage of the plaza bonus.

As of March 16, 1973, four of the five top apartments had been sold, while in the rest of the building only two had been sold.[28] The apartment on the 27th floor was still available for $288,000. They were $90,000 to $100,000 more expensive than those on lower floors. It is evident that a significant premium is placed on height.

At the beginning of January, 1973, Raquel Ramati was putting the finishing touches to a proposal to establish Park Avenue and Fifth Avenue Districts. The desire of developers to obtain the 20% plaza bonus caused developers to set back their buildings from the lot line and thereby to destroy the "unique uniform building line which characterizes extensive portions of Park Avenue and Fifth," she said. While conceding that the objective of the zoning resolution to obtain greater open space through the plaza bonus in high density areas was a desirable one, the Department of City Planning was of the opinion that "the ample width of Park Avenue and the proximity to Central Park made it unnecessary and inappropriate" on Fifth Avenue between 59th and 110th Streets, where it faced on Central Park, and Park Avenue between 59th and 96th Streets.[29]

The Department of City Planning was of the opinion that only if some other means were found to enable the developer to obtain the 20% bonus could a developer be required to build new construction to the lot line. Therefore, it was recommended that in order to maintain the strong building line along Fifth Avenue between 59th and 110th Streets and along Park Avenue between 59th and 96th Streets, the Zoning Ordinance be amended to require all new construction to be built to the lot line and to permit the developer to contri bute to a fund for the improvement and maintenance of off-site

but proximate amenities along Park and Fifth Avenues in lieu of providing on site plazas. Assuming that 17 sites were to be developed within the next ten years, it was estimated that approximately 2.3 million dollars could be available to the fund. This includes 20% reduction from the estimated real value.[30]

Discussions between the Department of City Planning and the Parks Council elicited a preliminary list of needed improvements to the Park Avenue Malls, to the West Side of Park Avenue, and to the portion of Central Park adjacent to Fifth Avenue. These improvements could be funded in lieu of plaza contributions:

- Replanting of Park Avenue Malls,
- improved maintenance of the Malls,
- replanting of the eastern edge of Central Park,
- renovations and maintenance of existing Central Park playgrounds,
- additional street trees, bus shelters along Fifth Avenue.

It was proposed that a separate fund be created to receive the in-lieu-of-plaza contributions and to finance the off-site improvements. The fund could be administered by either an existing or newly created non-profit organization which had as its central purpose a concern for the improvement and expansion of public open space and pedestrian amenities.

Care was to be taken to ensure that all monies contributed to the fund could be expended only on an established list of approved project categories and that the overseers of the fund would include the appropriate public officials, such as the Administrator of Parks, Recreation, Cultural Affairs Administration.

The amount of the contributions was to be established initially as a percentage of present estimated building cost, and was to be updated at five year intervals.

The proposal was to be an as-of-right proposal. Under the proposal, a building wall on Fifth and Park Avenue, of at least 125 feet in height, would be required before setback was allowed. Buildings would be limited in height to about 22 - 24 storeys.

The mandatory front building wall requirements also applied to all development along the street lines of a narrow street within 50 feet of its intersection with the street line of Fifth Avenue or Park Avenue. For the next 20 feet along the street line of a narrow street or for the next 75 feet along the street line of a wide street, the mandatory front building wall requirements were to be optional.

In a late breaking development,[31] the Board of Estimate gave final approval to the proposal. The vote was 12 to 10. With the Borough President of Queens, Brooklyn and Staten Island voting against the bill, the measure carried when Council President Sanford D. Garelik, who had previously opposed the proposal, cast his four votes for the bill. He changed his position because the bill, at his request, had been changed to put the money into the city's general fund earmarked for the park district where the buildings were to be constructed, rather than into a special trust.

The measure was supported by community planning boards that cover the areas all around Central Park, not just along Fifth Avenue. The assumption was that later this principle would be applied to all sectors around Central Park as well as to parks in other parts of the city. The widespread backing by the community planning boards was cited by Manhattan Borough President Percy E. Sutton as a major reason for his support. He noted, however, in voting for it, that he reserved the right to vote differently on such measures in the future.

Deputy Mayor Edward A. Morrison voted for the measure on behalf of Mayor Lindsay. He said:

> This is a zoning plan that makes sense. We know that ordinarily, when money is appropriated for parks, it is spent all over the city. This money would go to the special park areas in which the buildings are put up.

Controller Abraham D. Beame opposed the measure and called it:[32]

> ...essentially a zoning-for-sale system. If it is proper planning to permit construction up to the building line with an increase in bulk, then that should be incorporated in the zoning regulations without requiring the payment of a penalty. If this is not proper planning, then the payment of a cash donation will not make it proper and it should not be permitted.

The principle represents a major departure from the externalities concept and represents a further move toward the principle of recapture of values created by public action. The measure does not even make a pretext of combatting the externality of increased coverage or density. The funds do not go toward the creation of new and nearly open space but to maintenance of existing open space, often far removed from the site. Park Avenue, for instance, is two blocks away from Central Park; or of little recreational utility such as the traffic islands in Park Avenue. Adequate maintenance of such public open spaces falls within the province of the city rather than that of individual builders.

On the other hand the measure will make possible high coverage, high density buildings on small sites by substantially increasing the potentially achievable density differential. This would warrant demolition of sound housing that hitherto had been protected because of a potentially achievable density differential too low to warrant redevelopment. Thus, the indirect density control exerted by the plaza bonus system was rendered inoperative. Again the rue corridor argument is used to justify the measure. Park Avenue's street walls were to be protected from erosion. The uniform cornice line so typical of Park Avenue and usually given much emphasis in Special Districts, was, however, not recognized. Buildings may rise 25 storeys without setback from their lot lines. The quality of the spatial environment of existing abutting buildings will be prejudiced. Environmental attributes of buildings built under the regulations will be poor. The measure enables the developer to not only increase densities but also to achieve substantial construction cost savings.

Clearly, a case can be made for contributions to a fund in order to more effectively combat the effects of increased density or coverage in accord with a neighborhood plan. But the special park district legislation does not do this. Characteristic of early bonus formulas was that they ostensibly sought to internalize the impacts of

increased density and coverage with compensating amenities on site.

Legal support for incentive zoning rests on the extension of two traditional concepts: the concept of externalities and the concept of general welfare. Under the externalities concept land-use that creates external harm is prevented. The concept has been used to justify subdivision requirements such as park and school site dedication requirements on the grounds that the development will create new demands for such facilities and that therefore the developer must help pay for -- or ameliorate -- the external impact of his development. Similarly, the concept of compensating for external influences can be applied to bonus incentives. But the externalities argument is only applicable if there is a clear relationship between the density and coverage bonuses granted and the amelioration of the externality provided by the required amenity.

When the rationale between the bonus and the amenity is not clear, i.e. when it cannot be supported by the externalities concept, an extension of the general welfare concept is used to justify bonus formulas. Under this extension measures that enhance the environment may be required, rather than measures that simply protect it.

The lack of court cases involving incentive zoning is in large part attributable to the advantages the developer receives and who consequently has little interest in attacking the legality of that advantage. Attacks on bonus fomulas may be expected from the following quarters. First, from the abutting property owner who believes the impacts of the bonus will be detrimental to his property. Secondly, from the developer who believes that he did not receive a bonus comparable to the amenity he provided. The Lincoln Square case falls into this category. Thirdly, from developers who believe that they are being unjustly denied bonuses through arbitrary drawing of district boundaries. Fourthly, from developers who question the basic density limitation on the grounds that it has been set low arbitrarily to encourage developers to take advantage of the bonus formulas or on the grounds that the base level is too low to take advantage of without the bonus.

In spite of the Robin Hood traits of the Park District transfer device, developers are likely to be willing participants because they have a lot to gain in terms of developmental advantages at least over the short term, and by comparison little to lose through the cash contributions. The significance of the experience is that it sets an important precedent.

The question arises as to whether the Parks' District Legislation constitutes a prelude to general acceptance by society of the concept of recapture of values created by public action eventually leading to establishment of the concept as a principle for revenue raising. This question, it seems, need not be posed directly as long as it continues to be possible to operate covertly under cover of the loosely draped twin cloaks of the extended externalities and general welfare concepts.

Increasingly, it appears that spatial standards are being sacrificed as the city either accommodates to builders' demands or pursues planning objectives that are often quite questionable. Such attempts to sacrifice and erode spatial standards, however expedient they might appear on a short-term basis and from the point of view of construction, should be resisted because giving in to them will be detrimental to the objective of rehabilitating the quality of the spatial environment. However, because bonused amenities -- both on site and off site -- often do not adequately counteract and ameliorate the added bulk and/or coverage attributable to the bonus, the concept of contributions to a fund to better combat externalities and enhance the environment is a valid one. It needs to be protected from abuse. Its working needs to be improved.

The 1960 code, by and large, represented an expression of the interests of a dominant segment of the investment building community as these were perceived at that point in time. This chapter has shown the various strictures and constraints of the 1960 code as conditions changed, and has sought to shed light on the process of adapting the code in an incremental fashion to meet changing contingencies in the management of the production and marketing of space.

It has given an indication of the close relationships and interdependencies between the management of the urban spatial environment to greater public advantage and the management of the production and marketing of both office and residential space.

Chapter 19

Findings and Recommendations

Early attempts to regulate building bulk were resisted as potential developers of tall buildings sought to prevent owners of existing tall buildings from exerting a monopoly hold over space with superior environmental attributes. As tall buildings started to crowd one another, impairing environmental attributes, it was sought to overcome the environmental deficiencies attributable to lack of regulation through improved construction technology. Improved elevators, better foundation methods allowed even taller buildings which secured once again superior environmental attributes at key locations.

Regulation of building bulk did not become a priority issue as long as the demand for space continued to be strong. Impending regulation of building heights and bulk tended to provide an incentive for developers to capitalize on the creation of new values at the cost of destroying existing ones, because once restrictive legislation was enacted they would be able to exert a monopoly hold on space with superior environmental attributes and consequently derive substantial benefits from the ensuing value of scarcity.

This led to a further serious deterioration in the quality of the spatial environment in the financial district. The measures, then, did not contribute to arrest such deterioration but on the contrary accelerated it. They did not protect and enhance the values of those interests that had initially sought protection through restrictive legislation. Rather the measures provided protection of those values that had been created subsequently in the face of impending restrictive legislation.

Initially the problem had been seen as one of protecting a quite [illegible] range of interests. In the course of the process the problem was transformed into one of protecting the interests of a narrower range. To a considerable extent the task was seen as one of eliminating achievable intensity-of-use differentials subsequent to completion of the last generation of towers.

It is characteristic of the problem solving process that only the most pressing problem is addressed while associated problems are neglected. From a more inclusive point of view the problem should have been defined as one of also securing superior environmental attributes to future development. This however, was of reduced concern to the framers of the resolution.

Neither of the groups of interests concerned with protecting and stabilizing existing values had a vested interest in optimizing environmental attributes of subsequent development elsewhere. As a result, reformer-planners who advocated an alternative model of the spatial environment that addressed itself to the problem of securing suitable environmental attributes for subsequent development were overridden.

The rules had a crippling effect on the building type, the tower, that, had it been adequately spaced, would have provided satisfactory environmental attributes, comparable to those of buildings completed immediately preceding enactment of the 1916 resolution.

The solution of the limited problem of stabilizing real estate values was at the cost of creating a legacy of new problems resulting from the spatial environment promulgated by the 1916 Zoning Resolution. The rules eliminated achievable intensity-of-use differentials in only two developed areas, while in areas scheduled to undergo redevelopment, no significant limitations were imposed.

The varied impacts of application of identical geometric rules to dissimilar building types were met in different ways. Development since 1916 has been to a considerable extent dictated by the need to overcome the

limitations that the rules imposed.

Initially, however, the prevailing pattern of development was dictated by the behavior of the conventional developer which, in turn, was dictated by his and his lender's appraisal of the riskiness of a project. Erecting projects in rapid succession with little equity, they rely on their managerial and financial skills for a high velocity of turnover. Their risk-minimizing behavior resulted in clustering of developments at existing hubs of development, projects with short gestation periods and maximum densities and filling out the allowed envelope. As long as building was profitable they were content to build increments of rue corridors.

The problem of overcoming the deficiencies of the spatial environment promulgated by the 1916 code began to be addressed as competition for tenants increased. In the case of office structures, efforts were made to secure superior environmental attributes through increased utilization of the 25% tower coverage provision that allowed towers to penetrate the bulk envelope. In order to achieve practical tower floor sizes, it was necessary to develop large sites. Large tower plans on the other hand led to excessive amounts of deep space at the base of buildings. In consequence, deep space at the base of towers began to be cut back.

This led, as in the case of the Empire State Building and Rockefeller Center, to development at less desirable locations away from the hubs of development, where large sites were available. Locational attributes were traded off against environmental attributes.

Such developments were high risks and in addition demanded enormous resources. The projects had very long gestation periods. In consequence, such pioneering projects could only be undertaken by the very largest builders.

Two significant technological innovations aided conventional developers resist competition from such developments: namely air conditioning and fluorescent lighting. In that these innovations created new possibilities to utilize left over interstitial sites that had been bypassed as superior environmental attributes began to be more in demand, they created a renewed incentive to complete rue corridors.

In that deficient environmental attributes could be now upgraded, the need to replace obsolete structures was reduced, thus the innovations tended to contribute to a reinforcement of the rue corridor.

As a result of the innovations there was no longer a perceived need to develop superior open plan site plans. Moreover there was no longer a need to trade location off against improved environmental attributes. They eliminated the necessity to cut away allowed bulk from the base of towers.

While one major response to overcome the inferior environmental attributes resulting from the 1916 resolution exercised a spreading effect, the second response counteracted that effect and contributed to increasing concentration and densification at existing hubs.

The urgency to tackle the problem of changing the geometric rules of the 1916 resolution was substantially affected by changes in the type of space in demand. Moreover, there was also little incentive for those classes of real estate interests to undermine their market position by promoting legislation calling for space superior to theirs.

In addition, the rules, once set, conferred predictability and thus tended to survive despite their recognized deficiencies. The technological innovations also contributed to a prolonged life of the rules. But it became increasingly apparent that in spite of the innovations, anonymous components of rue corridors could not much longer serve the needs of corporate tenants.

Changing space marketing and production demands called for a prototypical high density office building with large repetitive floor plans with both peripheral executive space and secondary secretarial space; a prestige enhancing setting; economical construction and ease of maintenance. But the recession plane requirements and the 25% tower coverage limitation made the postulated building type possible only on the very largest sites.

The investment building community desired to exchange substandard deep space at the base of towers for substantially increased amounts of space on high floors with superior environmental attributes. Such cutting away of cubage at the base, allowing for landscaped plazas, concomitantly improved the environmental attributes of the remainder of the space on lower floors. Consequently, the investing building community opposed the Harrison, Ballard and Allen proposal of 1950 that would have contributed to reinforcing and perpetuating the rue corridor and a high density, high coverage environment.

Subsequently in the 1950's, a number of pioneering office towers were built utilizing the envelope piercing privileges of the 25% coverage provision. Substantial advertising value accrued to these buildings.

The need to change the geometric rules to overcome the rue corridor finally culminated towards the end of the 1950's when the limited opportunities to build large 25% coverage towers at prime locations began to be exhausted; the high density tower became firmly established as the prototype for commercial rental office buildings; demand for superior space continued to be strong and need was perceived to exclude high coverage, high density buildings on small and medium sized sites.

The plaza bonus system of 1960 made it possible to achieve this desired building prototype, because it encouraged assemblage of large sites; provided a greater achievable density differential on such sites rather than on smaller sites; reduced the necessity for the exceptionally large site; provided the possibility to exchange less desirable substandard space at the base of towers for substantially increased amounts of space on high floors with superior environmental attributes, including outlook; and concomitantly improved the environmental attributes of space on lower floors.

The plaza tower bonus system evolved in an interactive process aimed at the resolution of a specific problem in the management of marketing and production of office space. It overcame the negative effects of the rue corridor.

To a considerable extent office builders had been able to overcome environmental deficiencies of the 1916 resolution's rue corridor through incremental adaptive responses within the framework of the geometric rules. The predicament of housing was much more dire. Many of the city's worst slums were built under the 1916 rules. The 1916 rules contributed to rendering high-density, high-coverage luxury housing on Park Avenue prematurely obsolete. Considerable sections were promptly displaced in the 1950's when air-conditioning and fluorescent lighting contributed to making offices much more profitable.

Technological innovation was not able to assist housing overcome the inherent defects of the rue corridor as it had in the case of office buildings. The rue corridor, which promulgated the "hollow square" site plan on long narrow blocks, had been dealt a decisive blow by a series of experiments that showed how far superior the open plan layout was. In order to improve spatial standards, the open plan layout was necessary. But housing did not have the same resources at its disposal that Rockefeller Center had. Here outside help in the form of land write-down was needed to facilitate large scale assemblage necessary to achieve open plan layouts and overcome the debilitating effects of the rue corridor. It is no coinci-

dence then that the sponsor of the United States Housing Act of 1937 was Senator Robert Wagner, Sen., Mayor Wagner's father. It provided the means for land-write-down.

In the 1940's, major insurance companies assumed the role of sponsoring large scale city redevelopment based on open plan layouts. Such investors have staying power since they have large financial resources and are interested in a long-term moderate rate of return. The long-term investor saw the close-in location, the built-in protection of the controls in the urban renewal plan (which run for 20 to 40 years) and the increasing demand for space in convenient locations as sound justifications for his long-term investment. There were also tax advantages, related primarily to depreciation allowances, which constituted an additional important incentive. But the renewal process was too slow and the seasoning process too long for the typical conventional developer. The conventional developer also had less concern for the competitive position of the building in future years. Working with little equity, he depended upon creating value quickly. Typically the conventional developer makes his profit on the sale of the property once it is built and rented.

Well intentioned though the efforts were to create open plan layouts and thus overcome the effects of the rue corridor, they created new and serious problems associated with massive clearance.

In an important way the 1960 code provided an alternative to massive clearance in that it increased the opportunities for conventional developers to participate in the process of city rebuilding. In that it ensured protection of environmental attributes through bonus formulas, open space requirements and importantly through the way in which high density districts were juxtaposed with low rise and low density districts, it obviated large scale assemblage and clearance and deterred development of sites beneath a certain threshold size, it created suitable preconditions for the intermediate developer to participate in the production of residential space.

The plaza bonus formula worked to allow 20% larger buildings on sites spanning the width of the block and reaching back 150 feet to the district boundary, simplified construction by obviating tiered construction, facilitated standard repetitive floor plans and allowed for a higher percentage of apartments higher up for which higher rents could be charged.

The bulk envelope described by the 1916 code eliminated achievable density differentials in only two critical areas, namely in Lower Manhattan and on Fifth Avenue. As a consequence of not imposing significant limitations in areas undergoing redevelopment, the 1916 rules added a considerable element of uncertainty for developers.

With incremental remappings along the avenues -- linear extensions to the high rise spines -- it was intended to phase development in accord with the needs of space marketing to avoid glutting of the market.

Finally then the formula had been devised that helped rehabilitate the quality of residential environment in significant sections of Manhattan without resorting to area-wide clearance. New and old were juxtaposed successfully. Interior blocks were protected and could be reclaimed. A better mix of units within the neighborhood was provided. Interior block town houses and brownstones could be unslummed as single-room occupancies began to be eliminated and low rise town houses began to be converted into family units by enterprising middle-class families.

Neighborhood disruption and dislocation was much less than in the case of urban renewal. Along avenues incentives were created to develop housing where low density commercial strip development or obsolete old and new law

tenements existed. Years of exposure to clattering elevated trains -- now removed -- had contributed to blight along avenues.

Once it became certain, around 1960, that the days of the 1916 resolution and of the rue corridor were numbered, a strong stimulus was exerted for redevelopment to occur under the more lenient rules of 1916. Developers could build high density residential structures at key locations in low and medium density areas, such as in Greenwich Village or on East Side side streets, secure in the knowledge that their structures would benefit from superior outlook, light and air, as, with the expiration of the grace period, any significant achievable intensity-of-use differential would be eliminated in the vicinity, thus reducing the likelihood of further comparable redevelopment in the vicinity. As a consequence, considerable value of scarcity could also accrue to the developer.

This aspect of the rezoning process had a most prodigious effect on housing production. Up to a certain point, the longer the grace period, the greater was the inducement to back the new code.

To a considerable degree the rezoning process may be viewed as a process of allocation of achievable density and intensity-of-use differentials in an interactive, disjointed and incremental process in which various competing classes of interests sought to assert their respective interests over an extended period of time. A density differential is defined as the difference between existing density and potentially achievable density. An intensity-of-use differential takes into account both use change from a less profitable to a more profitable use and the achievable density differential. Through manipulation of achievable intensity-of-use differentials real estate values may be critically affected.

It was the FAR and district system of the 1960 code that was to provide the basis for selectively designating achievable intensity-of-use differentials. By the way in which it was applied, achievable intensity-of-use differentials could be alternately

- reduced or eliminated in areas where high density development has occurred;
- reduced or eliminated around areas of high density or undergoing high density redevelopment to prevent adjacent or nearby competing high density redevelopment;

- reduced or eliminated in lower density areas to prevent high density redevelopment from occurring;
- pegged high in selected lower density areas, often within a larger contiguous, lower density area to favor high density redevelopment;
- to temporarily set low to create holding zones.

In a series of incremental adaptations and under Felt's stewardship, V.W.S.& S.'s initial rezoning proposal was reformulated largely to provide a closer fit with the perceived needs of the investment building community for continued and expanded office and luxury apartment construction.

Outstanding examples are the blanketing of midtown with the highest density commercial bulk designations; the emergence of the high density residential spine strategy along the avenues; Felt's insistence on the early introduction of the grace period device; and the reformulation of the incentive formulas.

The fixed geometric relationships of the rules of the 1916 resolution were rigid and had not lent themselves to incremental adaptation and could in consequence not be easily adjusted to meet specificly perceived needs. They had not been responsive to the needs of developers for a system that could be incrementally adapted to meet changing

and emerging needs in the management of the production of space. Where the resolution's rigid rules created tensions and pressures, these had to be met, mainly by ways other than rule changes, e.g. through technological innovation. Whereas the 1916 code had been intended to and, as has been shown, to a considerable degree did promulgate New York's final form, it was understood, then, that the 1960 resolution would be subjected to periodic review and adaptive changes.

Changing conditions as well as the comprehensive amendments extreme detail and complexities created numerous tensions that invited dialogue between developers and the city. There was an incentive for various classes of real estate interests to seek to exert continuous influence on the rule framework.

Initially, as most of midtown was mapped for a maximum FAR of 18, there was little need on the part of developers to seek changes. The city had to look on while the enhanced achievable intensity-of-use differentials in midtown resulted in:

- the accelerated demolition of sound housing stock, of shops, restaurants, supporting services, and of department stores that tended to occupy large sites and were thus suitable sites for skyscrapers and particularly desirable because they did not involve assemblage;

- in excessively large buildings on side streets;
- in overburdening of sidewalks and subways;
- in threats to landmarks and the theater district.

Only when suitable sites began to be exhausted and demand for space continued to be strong did developers start requesting remappings in peripheral lower density areas that were contiguously adjacent to the highest bulk district and adjustments to bonus formulas to allow maximum densities and increased densities on smaller or on midblock sites.

Such pressures gave the city an important tool to negotiate for improvements to the spatial environment. By denying bonus formula adjustments, the city could achieve a deterrent to development or deflect development. Many of the code's rules lacked an objective basis and were often arbitrary. Where they created tensions, they enhanced the city's bargaining power. There was then a considerable utility to be derived by the city from the existence of such rules and concomitantly little incentive on the part of the city to edit such rules out of the code. The city could exert most leverage in connection with requests for mapping changes from lower density designation to higher density designations. These tended to be on the periphery of highest bulk commercial districts and often involved lots divided by a zoning boundary. To a considerable extent

special district incentive zoning was a response to the threats brought about by blanketing of large areas with the maximum density designation of the new code.

An effort to enhance the city's leverage in midtown by reducing the base level by 20% while maintaining the maximum FAR at 18 met with the determined opposition of real estate and was defeated. The city's principal opportunity to secure influence in areas where densities were already pegged high, was to offer even higher densities and increased coverage. But this was a critical trade-off to make. In exerting such leverage there was the danger of bargaining away valid standards.

Of all bonus formulas the plaza bonus had the greatest impact on the spatial environment. In that it could best be taken advantage of on large sites, it encouraged assemblage. It encouraged towers at locations where large sites were available or alternately where assemblage could be accomplished relatively inexpensively and where the greatest intensity-of-use differentials could be achieved. In that the bonus formula militated against achieving similarly high densities on smaller and intermediate sized sites, it served to dissuade redevelopment of smaller sites. On the other hand where smaller sites were relatively intensively used as on Fifth Avenue, assemblage of sites large enough

to take full advantage of the plaza bonus to achieve maximum densities, would be disproportionately expensive. Consequently the bonus formula tended to exert a protective effect on such areas as Fifth Avenue with its intensively used small and intermediate sized sites. The formula tended to draw development to where entire avenue blockfronts could be advantageously assembled, such as west of the Avenue of the Americas. Thus Fifth Avenue was leapfrogged.

This gives an indication of the critical role that can be played by bonus formulas. Had the controls instead allowed for the same maximum densities on smaller sites as on larger sites, the effect would probably have been accelerated transformation of Fifth Avenue, excessive concentration of density in tightly defined existing hubs of development, rather than dispersal of development within a larger area.

Thus although the highest density bulk designation blanketed the entire midtown area, the bonus formula worked to a certain degree toward dispersal of development.

The arcade bonus was hardly used. A higher award ratio would conceivably have made it possible to fill the 20% of total building bulk allotted to bonuses. This would have had a significant impact on city form in that it would have reduced the incentive for assemblage because achievable density-differentials would have been the same on smaller sites as on

larger sites. It would have stimulated redevelopment of smaller sites and could have caused rapid redevelopment, for instance, on Fifth Avenue. In that arcades are, in the rule, contingent on contiguous development for continuity and consequently favor high coverage reaching from side lot-line to side lot-line, they are basically irreconcileable with the concept of the plaza that discourages high coverage and contiguous buildings conducive to connecting arcades.

The preference given the plaza bonus formula reflects the exigencies of space marketing and production as these were perceived by the investment building community at the beginning of the sixties, characterized by an anticipated continued strong demand for space and a need for large sites with buildings for high densities. The plaza bonus formula facilitated larger buildings than were typical prior to 1960. These larger buildings, nevertheless, had similarly high densities as their predecessors under the old code.

Later in the decade space demands became more differentiated. The plaza bonus had, as intended, played an important role in the assemblage of large sites. Now these opportunities began to be exhausted. However, the demand for space in the Central Business District continued unabated. If they were to be met within the confines of the CBD, other measures were needed to enhance the development

potential of smaller sites. The twin measures selected were increased coverage and density. Increased density alone would not have sufficed because if significant open space demands were to be met typical floorswould have been uneconomically small. The key to higher densities was to increase coverage and thus to remove the deterrent to achieving maximum district densities. Both these objectives could be quite simply accomplished by simply adjusting the arcade bonus and broadening its scope. Of essence then was to provide the ability for developers to achieve the district density ceiling without forfeiting building coverage.

Timing the bonus formula adjustment played an important role in both the management of the spatial environment and the management of the production and marketing of space. It is appropriate to speak of a two phase strategy. In its first phase it created suitable preconditions for large assemblages and provided the basis for an entirely new spatial element in the inner city, namely contiguous open space systems consisting of the connected spaces of plazas, streets and avenues. It enriched the spatial vocabulary of the city which until that time had been largely dominated by the rue corridor theme.

Spatially defined plazas could also occur where redevelopment did not take place on adjacent sites or alternately where subsequent developments used a site plan configuration that provided for spatial definition of the plaza on the neighboring site. A case in point is the recognition and preservation of the spatial definition of the plaza of the Seagram's Building in the Roth Office's sensitive site plan design for Seagram's southern neighbor at 345 Park Avenue. Moreover, as already indicated its first phase tended to encourage dispersal of development and the establishment of beachheads rather than continued concentration at existing nodes. Buildings were tall.

The second phase of the strategy impinged on the spatial environment in a complimentary fashion. The first phase established the major theme and overall pattern -- reaction to the rue corridor through towers, spaces, dispersal, beachheads -- whereas the second phase allowed for a pattern of interstitial filling-in.

Increased coverage allowed for lower buildings. Thus the effect of an even levelling upward of building heights was mitigated. Increased coverage could contribute to the definition of the larger contiguous open space systems created by the plaza bonus. The bonus adjustment made it possible to shoehorn buildings into interstitial sites. The kinds of amenities elicited by the adjusted bonus

formulas -- arcades, covered passages, through block connections -- complimented the open spaces.

The next phase of the development of midtown, toward the end of the 1960's, is characterized by a beginning decline in demand for space. The Times Square area offered special development potential in that existing densities and economic intensities-of-use were low, thereby facilitating assemblage. The Theater District Legislation should be viewed as an attempt through a variety of measures to establish a new growth pole on the western periphery of midtown and at a point in time where a decline in demand of office space starts to become discernible.

The measures included allowing of unprecedented high densities in a narrowly defined area, permission to include theaters that were not counted against the floor area ratio, relaxations of coverage and setback restrictions, coverage increasing alternatives to the plaza bonus, special design assistance through the city's urban design group.

Whereas the as-of-right bonuses, applied on an areawide basis, met the relatively undifferentiated needs of a strong market demand for space, Special District Incentive Zoning is an attendant phenomenon of a declining overall demand for space in which a need is perceived and for differentiated

developmental opportunities to exploit the remaining market.

Special Districts were designed around specific individual building projects. District-initiating buildings emerged from an interactive process between the developer, his architect and the city, in which, to a considerable extent, design and program reflected the marketing needs of the developer. Although there was a degree of interaction between the design of the district rules and the package for the district-initiating building, it seems the demands of the developer took priority.

In that subsequent development within the Special District was at a substantial comparative disadvantage to development that had been able to avail itself of the interactive design process from which the district's rules had emerged, because the high degree of specificity of the district's rules tended to work as a straight-jacket for such future development, the competitive position of the district-initiating building tended to be reinforced.

In the Theater District (1967) the first of the Special Districts, conceived at a point in time at which the market for space was still strong and at which it was hoped to draw a significant amount of the remaining development potential to the Times Square area, no such straightjacketing effect was exerted. Subsequently, at a new low point in the demand for office space, special district zoning was the tool with which new space market possibilities were pioneered. The Fifth Avenue Special District and the Mixed Building Districts introduced Residential land-use to the Central Business District.

Although incentive zoning was initially primarily intended as a technical device to facilitate, by means of the plaza bonus formula, redistribution of a given number of FAR points on a prescribed, prototypical site as a way to overcome the stultifying straightjacket of the rue corridor envelope on the commercial office buildings, the principle of incentive zoning, once established, was increasingly to be used as a way to achieve a variety of objectives through use of FAR points as a kind of surrogate currency.

The experience has shown that bonuses are often awarded for features that could and should be required by police power as a prerequisite for permission to develop. Often amenities encouraged by bonus systems tend to serve

the developer more than they do the public. Bonus systems are subject to promulgating covert aims in the interests of major developers.

The process of arriving at the appropriate bonus level is fraught with difficulty and uncertainty. In the case of the Greenwich Street Special District development costs were weighed against revenues per square foot based on annual rentals less annual operating costs. The net rental income per net square foot was capitalized to establish the value of a net square foot of additional bonus space. Then the construction costs of developing a square foot of such area -- based on typical construction costs -- were subtracted from the capitalized values to obtain the incremental value of the net rentable area. Once the value of the surrogate currency had been established, the cost of providing the amenity -- based on average building costs -- was related to the amount of additional net rentable square footage needed to provide an appropriate incentive factor.

The following difficulties are inherent in this process. The value of the bonus to the developer will be contingent on the location and the rents that can be charged for the awarded bonus space. Consequently, with fixed award rates, incentive factors for one and the same amenity, but at different locations, may fluctuate quite widely at the same point in time, causing inequities, i.e. immutable codification

of bonus formulas on an area wide basis may not take respective locational values sufficiently into account.

At the same point in time, incentive factors for different amenities may range from positive to negative. Incentive factors are likely to change over time as costs of providing specific amenities change. Moreover, escalating construction costs are an impediment to establishing equitable incentive factors. There is a potential of windfall profits when monetary gains from the bonus are out of proportion to the costs of the amenity provided. Incentive zoning lends itself to falsifying or obscuring the true costs of providing amenities. It may foster corruption. Moreover, it is quite difficult to gauge incentive factors. Ideally, from the public point of view, the incentive factor should be slightly above compensation level. The compensation level indicates the transition point from a disincentive or a negative incentive factor to a positive incentive factor. An incentive factor just above the compensation level is the optimal level, because it is at this level that the city is relatively assured of getting the amenity, while at the same time, the cost is held to a minimum. Bonus systems may be a deterrent to redevelopment if incentive factors are too low.

Bonus systems may lead, through varying incentive factors, to a preponderance of one or a few amenities, e.g. plazas and a dearth of others, e.g. arcades. To a considerable degree improvements to the spatial environment through bonus systems are largely or wholly dependent on the vagaries of construction activity. Many bonused amenities are inappropriate or undesirable. Bonus systems are in general insensitive to changing conditions over time. They are often quite inflexible and unresponsive to perceived newly emerging needs. Incentive zoning often involves extended negotiations, thus reducing predictability. Bonus systems are not an adequate area-wide control. Particularly as-of-right bonus systems may encourage excessively large buildings at inappropriate locations, which may cause undesirable or unpredictable side effects such as shadows, shutting out of light, air and sunlight, blocking of outlook, and negative micro-climatical impacts. In that such large buildings may preempt the market for space, they may deter area wide redevelopment. Bonus formulas may often reduce in an undesirable way the comparative redevelopment potential of small sites through the way in which they impinge on the achievable intensity-of-use differential.

Bonus systems have often tended to create sterile and vacuous environments in that they have eliminated diversity. They have hastened the exodus of small businesses and supporting services. This may have a critical impact on the Central Business District's attractiveness. Plaza bonus formulas often tend to lead to undesirable interruptions of retail continuity. The plaza of the General Motors Building on Fifth Avenue is an example of this effect. Moreover, widening of the sidewalk by one developer may be ineffectual if other developers do not follow suit. Many of these side effects are attributable to the as-of-right nature of the bonuses and to the fact that the provisions are only applicable on a building-to-building basis. The success of bonus provisions is also dependent on demand for development within an area.

High FAR base levels are a general characteristic of central city bonus systems. Grafted onto such existing high base levels, bonus systems may lead to the building up of excessive area-wide densities. Moreover, at the time that the base levels were initially set, it was often not intended or anticipated that additional densities be introduced by means of bonus systems. Similarly, facilitating of development rights transfers subsequent to establishing of base levels, may increase densities in an unintended and unanticipated manner.

In addition succumbing to persistent pressures to increase coverage will also contribute to increasing district density levels.

In addition to permitting more profitable development of small and moderately dimensioned sites, increased coverage was also increasingly sought for developers of buildings on large sites. Increased coverage meant reduction of a building's height and in consequence, fewer floors which reduced construction time and cost and improved the building's ratio of volume to surface. Increased standard tower floor sizes improved the ratio of core to rentable floor area. Moreover, as more and more buildings had plazas, the value of plazas to developers diminished. They no longer had the need for the advertising effect. The impacts of increased coverage are more easily ascertainable than are those of increased densities. Increased coverage measurably impacts light, access and outlook of adjacent sites. The quality of the ground level environment suffers. The impacts are exacerbated where buildings face onto narrow streets as in the case of the Fisher Building in Lower Manhattan. Where substantiallyincreased coverage is granted for the first-comer building, this can impair the chances for similar high density development of adjacent sites and may sterilize such sites.

Where the precedent created by the first-comer building leads to a similar relaxation for new neighboring buildings, (such a relaxation is being currently sought for the site to the north of One Astor Plaza), the quality of both the public environment and the building's rental space may be seriously impaired. Real estate values may be impaired.

One might speculate as to whether obtaining increased coverage may have also been seen as a disingenuous strategy to secure a monopoly on superior light and outlook by sterilizing development potential on abutting sites. The cavalier attitude towards coverage conflicts with zoning orthodoxy. Increased coverage has been a critical constituent element of the bonus package not only in the pioneering theater district but also in the most recent Special Districts, i.e. both in the Fifth Avenue and the Upper Fifth Avenue, and in the Greenwich Street Special District.

The willingness to use increased coverage to bargain for amenities is probably in large part attributable to the interactive bargaining process by which the district-initiating building is typically arrived at and from which then the district rules are derived. Moreover the impact of increased coverage is not as dramatic in the district initiating building as it is subsequently when further development occurs. However, cumulative increased coverage might jeopardize the carrying out of further elements of the

plan, if the quality of the resulting spatial environment threatens to be seriously impaired. In the case of the Greenwich Street and Fifth Avenue Districts the impacts of cumulative increased coverage might not have been so apparent because of the fact that both district-initiating buildings were adjacent to open space or air parks, i.e. the plaza of the World Trade Center in the case of the Fisher Building and St. Patricks Cathedral in the case of the Arlen Building.

Whereas there was a perfunctorily demonstrable relationship between increased density in return for more open space, no such demonstrable relationship existed in the case of increased coverage.

Whereas prior to 1916 developments subsequent to and abutting on existing high coverage buildings could seek to overcome detrimental impacts on light, air and outlook by building higher, a limit to density preempted any such option under the new code.

Even the 1916 code had ensured that towers above a certain height would not have more than 25% coverage.

Whereas 40% towers located on wide avenues backed up by low rise air parks recognized to a certain degree the underlying philosophy of the open plan layout, this could not be said of the large high density high coverage tower -- the Fisher Building -- pushed up closely against narrow streets.

While the residential environment of the Arlen Building might be adequate in spite of the increased coverage, by virtue of the twin air parks above Cartiers and St. Patricks, high coverage residential towers elsewhere in the district, without such assets, would have a considerably less desirable environment.

The experience has shown how, to a considerable degree, city design was subordinated to the exigencies of managing space production. Nevertheless, pursuing the objective of enhancing the public spatial environment was invariably used as a pretext to obfuscate the pursuit of partisan aims of particular classes of real estate interests. Typical of the process was that investment builders sought to ride on the coattails of conventional enlightenment in pursuing their limited self-interested objectives. Popular urban design concepts are used to emphasize the public benefit aspects of bonus formulas and to deemphasize the advantages accruing to developers. Noteworthy is the generally close fit between developer's perceived needs of space production and respective favored specific urban design values at separate points in time.

Favored and influential city design values in the late 1950's were those of the "ville radieuse", the "tower in the park" and concomitantly a general revulsion against "unbroken blocks of masonry." This was at the same time that key investment builders were promoting code revisions to facilitate large site assemblages to allow for tall office and residential towers surrounded by a cordon of space.

Late in the 1960's when large sites were increasingly difficult to acquire and demand for space continued to be strong a corollary switch in preferred urban design values away from the "tower in the park" to the rue corridor, which was considered to be more "urbanistic" is apparent.

When key investment builders started talking of the need to get away from the "single-note theme-song" of the sixties, namely the tower surrounded by a plaza, they were in fact signaling that assemblage had become difficult and that there was a perceived need to raise site coverage and the potentially achievable density differential, on sites other than the large sites, to levels comparable to those of such larger sites.

The "rue corridor" is conducive to high coverage of sites, as it implies building from side lot-line to side lot-line. In consequence, in that it reduced the pressure

to assemble large sites and make redevelopment of smaller sites more viable, it was in accord with investment builders' emerging desire to develop smaller sites at high densities.

Leaders in promoting the street wall were former students of Vincent Scully at Yale, who formed the nucleus of the Urban Design Group. Recognition or creation of unformly high "street walls" was advanced as a key concern in most of the Special Districts.

Creation of such a wall is, of course, contingent on the redevelopment of sequences of contiguous sites. Prerequisite precipitate area wide redevelopment is, howdver, not likely to occur.

There is a noticeable tendency to rely on district-wide design objectives in justifying design measures applied to individual buildings. A proposed building's adherence to a district plan, particularly if it is the initiating building or a key constituent element of such a district plan, may serve as a powerful argument to justify special measures, such as increased FARs or coverage, beneficial to such projects.

In that district initiating buildings emerged from an interactive process between the client, his architect and the urban design group, they usually reflected the developer's specific needs for his site. For instance, while the Bankers Trust Building, the district initiating building

of the Greenwich Street Special District had a 20,000 sq. ft. second level plaza which conveniently tied in, by means of a footbridge, to the Trade Center, it concurrently benefited from the very large ground level floor that was thus made possible.

Although aimed at achieving evanescent district goals, the special district process did have significant utility in achieving substantial piecemeal change on key sites, change that in and of itself could enhance the quality of the spatial environment, even without further elements of the district being implemented. The district plan tended to create tensions between prospective future developers' buildings and the district's legislation. Consequently, future developers would have to enter into negotiations with the urban design group. In this manner then, the Special District device afforded an opportunity to the city to influence the design of individual buildings.

Several distinctive, individual buildings have emerged from the various special districts, although usually not more than one per district. However, in none of the districts that espoused district design goals, such as the second level walkway along Greenwich Street, has any significant headway been made toward achievement of those goals.

Amenities provided through incentive zoning tend only to address the very tip of the impact iceberg of large buildings. Mayor John V. Lindsay has pointed out that "density is responsible for inevitably higher costs for almost every conceivable service." All high-rise office construction, where bonus systems have been operative, has been concentrated in the tiny areas of lower and midtown Manhattan. While the clustering of economic activities in midtown and downtown Manhattan skyscrapers does provide very sizeable benefits to firms within the cluster, public services such as transportation, parking, police, sewer systems, power producing capability, water delivery all must be expanded substantially as densities are increased.

Increased expenditures will be needed for road repairs, street cleaning, garbage removal, etc. Moreover, many costs of density and congestion do not show up in budgets. They include, for example, buses operating inefficiently because of traffic tie ups, illegally parked cars preventing sanitation trucks from sweeping the streets, and slowing down the process of garbage collection; ambulances caught in traffic; workers late for work.

A major impact is created in that office buildings have not been designed to conserve energy. In spite of the plaza bonus new tall office buildings still crowd closely together. Consequently even on higher floors

there may be no view of the sky and, as a consequence, increased dependency on artificial lighting results. In the past the Illuminating Engineering Society has regularly raised its recommended lighting level which currently is 100 foot candles for offices. Even with the use of relatively cool fluorescent lighting the summer air-conditioning load is increased by as much as a quarter.

One lighting specialist maintains that if all the office buildings in New York used heat absorbing glass and double glazing there would be no problems with electricity. Different kinds of exterior walls for different exposures should be considered. In calling for more control of daylight through the glass walls, one interior architect said: "You don't need blazing illumination everywhere in an office anymore than you do in a home."

Developers' low first-cost mentality militates against such measures because it would add to the initial cost of the building. Moreover, building owners buy electricity wholesale and earn a profit by retailing it to their tenants and consequently have little incentive to conserve energy. Energy waste occurs in cooling, heating, lighting, ventilation. In one recent year the addition of 17 million square feet of office space in Manhattan raised the peak demand on Consolidated Edison by about 120,000 kilowatts, enough to supply Albany, New York.

Shape and orientation of the building itself can play an important role. Heat reflected from the hard surfaces of the plazas themselves exacerbates the cooling problem. Planting would reduce heat loads on such plazas.

* * *

This thesis has shed light on the effects of zoning controls on the management of the urban spatial environment. It has revealed how difficult it is, once rules are imposed, for these to be changed. Even though rules may be redundant at their inception or may become redundant, this will not deter development where development pressures exist. It may shape development in a crippling manner but it will not stop it. It may also deflect development as has been shown, and stimulate extraordinary measures and exertions for the deficiencies to be overcome. Thus the 1916 controls had very significant side effects.

The situation is different where development pressures are weak. Here it appears that rules may deter development or be a serious impediment to development. The experience suggests that modifications to rules may be a significant stimulus to development.

This thesis has indicated that considerable attention needs to be paid to design and application of zoning

measures and suggests that a closer relationship between the goals of managing the spatial environment to greater public advantage and those of developers should and can be achieved.

The final section will give an indication of how the dichotomy between the goals of managing the spatial environment and developmental goals can be overcome.

This thesis has also shown how rates of change can be significantly affected through timing of introduction of controls and how development stimuli may be released, which may lead to patterns of development that are different from preceding patterns or the prevailing pattern subsequent to the code change. It has shown how subsequent to 1960 a more adaptive management of the spatial environment was pursued.

Incentive zoning was a major tool of the strategy. Its formulas could either work as a temporary deterrent to development, create holding zones, accelerate development or shape development in different ways at different points in time within the same area; it could impact and shape area-wide patterns of development, but it could also shape individual buildings, create beachheads for development; focus development demand in specific areas; provide the essential preconditions for take-off to be triggered as at Times Square; it could spearhead entirely new markets for space and create appropriate preconditions for existing and new buildings to be juxtaposed, and provide average area-

wide densities that were comparable or lower than in urban renewal areas. Finally, it provided in a major way an alternative to urban renewal. Incentive zoning's record of accomplishment, then, is, by and large, quite significant.

Chapter 20

Development of Alternatives

This concluding part offers some suggestions and sketches out some plausible options that are intended to stimulate planners and to help them respond to the challenges facing them. It is intended to be neither an exhaustive catalog of solutions nor a manual of design standards. The purpose is to suggest some of the issues which planners should consider in the management of the urban spatial environment and to provide some suggestions on how they might address these issues using incentive zoning techniques.

The first and most important step in developing a bonus system is for the city to develop a clear idea of what is to be accomplished by the bonus system. The general intent -- to encourage a better environment -- needs to be translated into specific objectives. These purposes set the groundwork for every thing that follows and are in consequence critical to the success of the bonus system.

We need to distinguish between bonus systems that apply within larger contiguous zoning districts such as in midtown, and such systems that are operative within small districts, i.e. districts surrounded by lower density districts such as

the narrow R10 districts flanking the avenues.

From the point of view of equity the R10 district system and its bonus formula was not optimal because it depended on a reduction of comparative development potential on adjacent interior blocks to achieve its superior environmental attributes. This, of course, was to no small degree the precondition for the success of the high spine redevelopment strategy in Manhattan. These or similar mapping patterns did not occur elsewhere in the city. Indeed, as will be recalled, they had not initially been intended for Manhattan either. Only at the insistence of the investment builders were incentive formulas and district boundaries revised in an envelope deterministic manner to better meet the needs of the investment builders.

It would seem desirable to attempt to design bonus systems that allow for similarly strong stimuli for development as under the R10 - R8 and R10 - R7 mapping patterns and their bonus formula, but which do not depend on similar density gradients for their effect.

A careful survey of existing development potential needs to be undertaken. Development might be deterred for any one of a number of reasons or for a combination of reasons. Often the achievable density or intensity-of-use is unattractive to developers. Assemblage might be too difficult. On-site parking requirements may make it necessary to provide

below grade parking which could be too costly. Coverage requirements might make it necessary to build a taller building than economically practical.

But in large areas of the city the critical factor deterring redevelopment will probably be neighborhood and area attributes, rather than specific limitations of zoning on individual sites.

The study would seek to identify those areas where zoning restrictions play a role in deterring development. It would examine to what degree zoning changes could make development more easy. It would at the same time examine the trade-off involved in making changes and would identify the nature of the changes that would be appropriate.

Bonus formulas could be devised that are aimed at achieving more facilities, for the benefit of the residents, including recreational space, more useful open space, a wider choice of housing unit types; and for the benefit of the wider neighborhood, more involvement in the site planning and control of developments by the community, better assimilation of projects with existing development including retention of existing useable and/or historic buildings and incentives for the development of small sites; for the benefit of both the project residents and the wider community, a wider choice of housing accommodation, more varied forms of projects, more opportunity for improved site planning and broad neighborhood

design.

Criteria for prototypical situations will be established by the city, the community and representatives of the real estate industry. In this process, a key interface role may be played by the Urban Design Group.

Care needs to be taken that the incentive factor is not excessive. Visual and activity surveys will play an important role in formulating the criteria.

I propose a bonus system that would recognize specific localized conditions and objectives while also allowing for specific area objectives identified in district or community plans. It would not represent an immutable codification but would be reviewed and adjusted to meet newly perceived needs. This would be done either on a regular basis or when specific and predetermined conditions occur. It would encourage and stimulate development while at the same time address a variety of problems of concern in the management of the spatial environment.

Coverage in relationship to density may be varied in a variety of density ranges. We may use open space between tall buildings in a variety of ways; we may create or preserve park like spaces; we may use part of the space for low-rise housing either attached, patio type housing or three-storey family units, or town houses attached in rows; the space in between may also be used for community facilities

such as theaters; or it may be used for retention of historical structures or valuable existing housing stock such as town houses or brownstones.

We may use wide open spaces between such towers to preserve vistas and views.

The preceding is based on the assumption that the level of density allowed of right is the same over larger areas. New possibilities emerge as building types are perfected that provide a much higher volume to coverage ratio than was previously economically plausible. This allows medium to high densities with still significant amounts of open space.

We can, for example, first create environments that are low density, low coverage but high-rise. The city might then, at some later date, double the allowed densities. Using a similar building type, there still would be ample space between buildings. Or, alternately, the city might call for low-rise high coverage development in the second stage providing a moderate overall density for both stages.

Under the proposed system the application and the phasing of introduction of special district overlays will be of essence. These may be applied temporarily, over a longer period of time or permanently. They may be incrementally expanded and may be overlaid over one another. Within district overlays bonus formula adjustments may be made

to meet changed needs.

Special district overlays may also be applied for a short period only to provide an incentive for development to occur under more lenient conditions than normally apply. In addition to increased density or coverage, the developer will have the incentive of profiting from a relative quality of uniqueness and concomitant value of scarcity once the temporary provisions expire.

This proposal is an application of a principle encountered in the grace period which, as will be recalled, had a strong effect on the spatial environment.

District overlays in which specific rules apply may be incrementally expanded according to an announced schedule or alternately when certain preconditions have been met, such as the reaching of a given development threshold in the initial district increment. This proposal is akin to a formalization of the intended informal strategy of incremental remappings to higher densities along Manhattan's avenues.

Within given district overlays adjustments to bonus formulas may be undertaken in accord with specific planning aims, when specified preconditions are met. This proposal has its roots in the midtown experience in which bonus formulas first favored buildings on large sites and subsequently were adjusted to give similar status to the small site.

Where uncertainty exists as to whether specific incentives will be a sufficient inducement for development to occur, the specific district overlay may be applied successively in various areas with similar characteristics.

District overlays may overlap one another. Some special districts will fall entirely within a larger special district that embraces a major part of the borough or even straddles borough boundaries. In other areas where stability is of essence and preservation of the existing quality of the spatial environment is desired, rules will be less flexible and will be of a more permanent nature.

Under the bonus system, bonuses would be awarded under specified circumstances for assemblages that include parcels on both sides of a street or avenue, or assemblages extending over more than one block. This will greatly enhance flexibility in achieving neighborhood design goals, as will be shown in the following prototypical examples which give an indication of the variety of objectives that may be pursued:

- Seventh Avenue, north of Central Park, resembles a wide stately boulevard with trees lining both sidewalks and the mall in the median. The usual redevelopment strategy would be to map R10 for towers along the avenues. To preserve the spatial quality of the avenue, while at the same time allowing development to occur, a district overlay is applied-- sidestreets and avenues are currently

mapped at the same densities -- with bonus formulas that encourage assemblage, low coverage provision of common open space, as well as retention of town houses on the interior block. In that assemblage is encouraged on both sides of the street, a midblock through block vestpocket park may be created, with a point block facing onto it from across the street. The bonus formulas may be designed to keep neighborhood density levels at the same level as if the usual R10 - R7 juxtaposition had been mapped.

- In yet another avenue situation, bonus formulas would encourage -- through use of the expanded zoning lot definition -- concentration of allowed bulk on one side of the avenue or side street and creation of a blockfront wide park on the other side. This principle can be applied to achieve a staggering of towers on a skip block basis. This would in and of itself constitute an added incentive to developers because it would enhance the buildings' environmental attributes.
- In another situation, rather than creating the stereotype symmetrical avenue cross section of axially arranged towers, bonus formulas could be designed to encourage low coverage point blocks and open space and to discourage retail uses on one side of the avenue, while on the other side they would encourage a widened tree-lined sidewalk, a continuous arcade and concentration of shops and neighborhood services.

Under the proposed system, incentive zoning techniques could be used in a number of ways to overcome limitations to the development of specific site categories. This option may be particularly germane in areas outside Manhattan. If, for instance, the useable open space requirements clash with on-site parking requirements necessitating below grade parking, then a bonus might be considered for below grade parking, as has been proposed for Toronto, Canada. Or, alternately, a cash contribution to a fund to be used for the construction of a neighborhood parking structure in the vicinity.

The same general principle of cash contributions to a fund in exchange for increased coverage and/or density could be applied to get small vest-pocket neighborhood parks in the proximity of the development. This option might be considered where difficulties in assemblage prevent large sites from being assembled.

Recent advances in structural systems, such as tube-within-tube and framed tube structural systems, have made it possible, by reducing the comparative unit cost of enclosed space, to package a given large amount of space more economically in particularly large, high rise buildings than in several smaller buildings.

Current zoning controls militate against such buildings in Manhattan as of course elsewhere in the city, in that unusually large sites would be required which are not

typically available except possibly on the extreme periphery of the CBD, on landfill or in marginal areas and far from commuter rail or transit access.

However, RPA's projected demands for office space in Manhattan suggest that pressures will be brought to bear for zoning changes to allow such structures to be built. Such pressures should be resisted. Such buildings would be most appropriate atop commuter rail terminals and at points where subway lines intersect, such as the Long Island Railroads' Atlantic Terminal in Brooklyn and Jamaica Center in Queens. Thus incentive zoning provides us with an opportunity to attempt to deflect such developmental pressures away from Manhattan.

RPA has identified as the most critical part of the journey to work the part between place of work and commuter rail or transit access. Appropriate bonus formulas could work toward assemblage at such transit hubs to provide the preconditions for such highrise structures rising from low or medium rise surroundings, while at the same time maintaining overall densities on an area-wide basis at such a level to preserve the rest of the area's low rise profile. A circularly shaped special district with the transportation hub at its center would be superimposed on the zoning map. Within it, an array of bonuses would be awarded that would have the cumulative effect of encouraging high intensity

development close to the hub, while at the same time discouraging less intensive development away from the hub. Appropriate bonuses would include graduated bonuses for proximity to the transportation hub rising steeply with increasing proximity; bonuses for large assemblages; bonuses for low coverage and possibly also for retention of existing buildings on site. In addition to benefiting from the bonuses, the developer would also benefit from excellent transit and rail access, and superior environmental attributes to both lower and upper floors, attributes that he would probably not enjoy in Manhattan.

The strategy of decentralization should be augmented by appropriate policy measures to limit further concentration in midtown and lower Manhattan. Whereas in Brooklyn, Queens and the Bronx, special efforts will be needed to attract development, in Manhattan measures should be applied that reduce the incentives for continued high density office development in the small areas of midtown and lower Manhattan. These might include curtailment of further remappings to the maximum bulk designation, and curtailment of bonus formula adjustments that allow shoe-horning of high density high coverage buildings onto interstitial sites.

With respect to density transfers, I have ambivalent feelings. On the one hand, they do have a certain potential for preserving air parks, open spaces and landmarks, but on

the other hand, the experience since 1961 indicates that the principle can seriously exacerbate the density problem in congested areas. It endangers low rise development on interstitial sites, thus posing a potential threat to the continued existence of valuable air parks. Moreover, it almost inevitably means that setback rules will have to be waivered, that sky exposure planes will have to be penetrated and that coverage will have to be overstepped, impairing environmental attributes to neighbors -- and also to the occupants of the building in question -- possibly to the extent of sterilizing abutting sites. In addition, density transfers tend to provide the potential of windfall profits, if they are transferred from secondary locations to prime locations.

Closely linked with the question of development rights transfers is the question of development rights sales by the city. While there is much to be said for cash contributions to earmarked funds to achieve amenities in accord with a neighborhood plan, in lieu of actual construction of amenities, sale and transfer by the city of surplus development rights above such large buildings as the public library, or above closed streets in urban renewal areas, as is being considered in the case of the South Street Seaport Museum, raises serious questions. Such sales and transfers will necessitate reattachment to other sites which will create

problems of the nature indicated earlier. The strongest bidders for such development rights will be at prime locations, locations that are already experiencing excessive congestion. These are precisely the areas where further densification should be resisted. Moreover, the sale by the city of surplus development rights will tend to undermine the workings of the real estate market and add an element of unpredictability. The sale of development rights between willing neighbors should be seen in a different light. Consequently, I recommend that serious consideration be given not to extend selling of development rights by the city, at least not in the context of midtown and lower Manhattan. I also suggest that serious consideration be given to rescinding the increased densities and coverages granted in the special districts in midtown and lower Manhattan.

What is the likelihood of such policy measures gaining acceptance? Real estate interests will probably divide into two factions. The measures may expect to find strong support among those developers who are currently suffering from the effects of the high vacancy rate, while developers advancing plans for new projects in anticipation of a resurgence of demand wil tend to oppose the measures.

The first half of the Seventies, then, might be an appropriate point in time to consider "putting the lid on" in Manhattan in terms of further densification -- but this time in earnest -- and to actively pursue public policies that promote decentralization, some of which have been indicated in this thesis.

Appendix A

Roots and Precedents of Incentive Zoning

In 1930, at the third meeting of Les Congres Internationaux d'Architecture Moderne, in Brussels, Walter Gropius attempted to demonstrate the relationships existing between building height, open space, sunlighting and orientation.[1]

Using parallel buildings, Gropius found that for a given total floor space on a site, it was better, from the point of view of lighting, to build higher buildings farther apart. This point is demonstrated by comparing three alternatives on a given site that all have the same density, but in which the density is accommodated in parallel rows of buildings of either 5, 10 or 15 storeys in height. Whereas the angle subtended at the ground floor in the 5 storey arrangement is about 51 degrees, it is reduced to about 39 degrees in the 10 storey arrangement and 36 degrees for 15 storeys. Gropius noted that there was a limit to the light improvement obtainable in this manner.

In establishing this quantifiable relationship, Gropius provided the theoretical basis for incentive zoning. The inference of his finding was that densities could be increased, while maintaining the same standard of daylighting if the proportion of open space was increased.

Gropius only examined parallel buildings. Moreover, he apparently took no account of the gap occurring between the ends of buildings.

It occurred to researchers of the Building Research Station in Great Britain that such gaps might be utilized to obtain a view of some portion of the sky at a sufficiently low angle for the light to penetrate better into the room. To test the hypothesis, every second building was turned through 90 degrees on plan. This led to a 70% increase in penetration. In the parallel arrangement of buildings, the sky is more or less of constant height as one goes back into the room. With the alternative arrangement, a substantial area of sky is visible much lower and consequently, its effect on the penetration of light is much greater.[2]

The amount of direct daylight to be found at any particular point in a room depends almost entirely on the size of the patch of sky visible from the point. This, in turn, is limited by the top and sizes of the windows and also by the skyline of any obstructing building.

At a lecture read at the R.I.B.A. on 23 January, 1943, William Allen stressed that this was:[3]

> A significant point to establish, because from it, we can postulate that a serrated skyline has advantages in respect of lighting not possessed by the constant skyline, which it has been the custom to encourage through many centuries of town planning.

Next the researchers compared other plan types: the hollow square, the cruciform, including the "L" and "T", the "Y" and the rectangle. The floor area ratio was held constant as was the spacing. Heights varied as each plan type had a different area on a single floor. The hollow square was lowest, the cruciform next. Sites were 200 feet square with

the buildings reaching across the entire site. With streets 60 feet wide, spacing was 260 feet.

It was found that the hollow square plan configuration led to the least successful daylighting. This was unfortunate, because where independent piecemeal development occurs, the hollow square is virtually the only possible form because there was nowhere else to put the individual buildings than along the street frontage.

Allen noted that before World War II, the FAR in the City of London was of the order of 2. However, where redevelopment had occurred, the tendency was for the FAR to be 3, 4 or more. Consequently, the continued use of the hollow square in redevelopment would lead to a deterioration in daylighting.[4]

Allen concluded that unless it became possible by some means to undertake comprehensive development in urban districts:

> ...no material improvement in daylighting can be obtained except by the unlikely and, in many respects, unattractive course of reducing the density of development.

A Daylight Code was developed, based on the findings of this research, which took account of the light coming past the sides of buildings as an alternative to the light coming over the tops of buildings, as was the invariable rule with previous forms of control. The Code consisted of alternative solid angles, representing patches of sky. The geometry of these alternative patches was described in A Form of

Control for Building Development in Terms of Daylighting (1947). The alternative angles, drawn on paper as "Permissible Height Indicators," are used for testing the effect of any building on adjacent buildings.

One consequence of the Daylight Code was that since account was taken of the light coming from past the sides of obstructing buildings, towers could be constructed on appropriate sites of virtually unlimited height, while complying with the Code. It was thought that use of the floor area ratio device, which the British called the floor space index, would be a suitable method of regulating density in central areas. According to D. H. Crompton, H. E. Beckett of the Building Research Station had been the first to use the device. In residential areas, it was officially suggested by the Ministry of Housing and Local Government, in 1952, that density be regulated by limiting the number of rooms per acre.[5]

In 1947, the Ministry of Town and Country Planning made recommendations in the Town and Country Planning Act, for a form of control of building heights and space about buildings, in both central and in residential areas, that were largely based on the findings of the Building Research Station. They were incorporated with alterations and additions, in the Holden - Holford Plan for the City of London and used by the London County Council. In addition to ensuring a reasonable standard of daylight for offices and for dwellings, this

control was intended to bring about improvements in standards of ventilation and noise insulation and in conjunction with the new floor space index device (floor area ratio) to permit a greater flexibility in site planning arrangement.

In January, 1954, Gordon Stephenson, who holds a Master's Degree in City Planning from the Massachusetts Institute of Technology, found the "persistence of the rue corridor ... amazing. Haussmann is dead but Haussmanization...which was not envisaged when the 1947 Act was prepared...lingers on."[6]

A few months later, in June, 1954, I. M. Richards, writing in the Architectural Review, found "the even levelling upwards over larger areas at a time which takes place when every site is developed to the maximum extent, permitted by the plot ratio (FAR) of 5½ at present enforced...was destructive of the whole character of the City, as well as its agreeableness as a place to work in."

Richards called attention to the existing tradition of vertical punctuation represented by the Wren steeples.

A series of slim skyscrapers carefully placed, might be "a quite inspiring contemporary equivalent related to the new scale which increased land values and modern building techniques have inevitably brought into being... Permitting a few thin skyscrapers, between which the City panorama could be seen, would be less obstructive than large acreages of building of perhaps half their height."[7]

He goes on to say that the principle of the plot ratio:

> ...should not be applied as an invariable rule to every site however small. A far higher ratio on an isolated site can be counterbalanced by lower ratios on surrounding sites, so to provide a greater variety of skyline and allow light and air to penetrate into the streets between occasional high building, as well as to allow the planning of maximum occupancy of whatever points in the City circumstances may require.
>
> ...A policy of mere infilling is quite unworthy of the City's reputation.
>
> ...Developers of building sites may be commercial rivals, but when it comes to choosing between a City of well coordinated buildings and a mere conglomeration of unrelated structures, each destroying instead of enhancing the effect of its neighbor, their interests are wholly identical.

Richards found that the weaknesses had been encouraged by a spirit of "What-I-Have-I-Hold" commercialism and by "Government niggardliness about capital investment." He called for "heroic" measures, involving both thought and action of the boldest possible kind, something quite different from the cautious nibbling at problems, the carelessness about visual values, and the tendency to shelve difficulties in the hope that they will solve themselves, which have characterized the rebuilding of the City since the war.

Stephenson found that the new planning technique gained ground but slowly:[8]

> Too frequently, the 1947 Act is being used to dragoon developers and their architects to line streets with buildings of uniform height and midiocre facades and all in the name of good planning. Use, economic demand, daylighting and layout techniques, which are modern, yet proved by time, are ignored.

In October, 1955, in an article in the Town Planning Review, that was to prove to be extremely influential,

D. H. Crompton suggests the failure in the City of London, on the part of private developers, to make use of the demonstrated advantages of the open plan was in large measure attributable to the ability of developers to attain maximum floor areas, while complying with the Daylight Code by providing relatively low rise, high coverage buildings, which were less expensive than tall buildings. Crompton writes:[9]

> There appears then, to have been little incentive to develop large sites, possibly because with a fixed F.S.I., the advantages of the open plan are offset by the necessity, in such development, to provide coorespondingly tall buildings. In practise, this lack of incentive has resulted, in spite of the new controls, in low standards of layout arrangement.

Crompton then examines the possibility of creating an incentive to assemble large sites through application of sliding scale bonus system, based on the Building Density Index.

The Building Density Index differs from the Floor Space Index only in that the area of the site covered by buildings is not counted. The effect of a control by this ratio, would be to enable higher F.S.I.s with tall buildings and low coverage. This would tend to encourage open plan forms. The possible additional cost of such development should be "more than met by the additional floor areas allowed, as well as by other advantages, such as carparks, made possible with the open plan."

Given a B.D.I. of 6, the resulting F.S.I. would be 2.0 when the average number of storeys is 3; 3.0 when it is six; 3.6 when it is nine.

Density zoning by B,D.I. would make it impossible to determine precisely the amount of floor space eventually to be built in an area. Crompton discounts the necessity to control density this closely, "either from the point of view of overall floor space needs, traffic generation or the effect on the spread of values." He writes:

> If a B.D.I. of 6 were imposed on a whole zone, the F.S.I. resulting would probably be between 2.0 and 3.0, the exact figure depending on site sizes and the extent of grouping of sites for redevelopment.

D. H. Crompton's article was read with interest by a group of architect-planners, who had been called in to study Philadelphia's bulk controls and to propose a new system of bulk control. They were Robert Geddes, Melvin Brecher, and George Qualls. The group was intrigued by the bonus idea and sought to apply it in Philadelphia. In 1955, Philadelphia's Mayor Joseph S. Clark, had appointed a Zoning Advisory Commission, headed by Architect, Planner and University of Pennsylvania's Dean, G. Holmes Perkins, to begin a comprehensive revision of Philadelphia's zoning ordinance.[10]

The Geddes group chose Realtor Reynold Greenberg Jr. and University of Pennsylvania Law School Associate Professor Paul Mishkin, as their consultants. G. Holmes Perkins had great hopes for "a new architecture in which buildings will be seen as three dimensional sculptures, surrounded by open space."[11]

> We've got to get the open spaces back. One thing we have lost in the past several years is the creation

> of great park systems like those our grandfathers used to build.

He believed that bulk zoning, with bonuses, would be the only way to provide such open spaces once again and thus to make city life decent living for the person on foot.

The basic FAR was set at 5 to 1. Premiums were allowed on streets 60 feet or more in width in the city's highest density commercial district, for plazas, building setbacks, but also for arcades. The base level was set low to recognize the low city profile. A floor space bonus of 10 square feet for every square foot of open space on the ground was granted. Smaller floor space bonuses were granted for arcades and building setbacks on upper floors.[12]

On a 10,000 sq. ft. site, a developer would be entitled to 50,000 square feet basic floor area. However, on the same site by providing a plaza approximately half the size of the site, he could earn another 48,000 square feet of rental area, i.e. he could almost double the size of his building. If he also utilized the arcade premium, he could earn another 15,000 square feet. The setback premium could result in another 10,000 square feet increase. All in all, the bonuses could stack up to provide, in conjunction with the basic floor area allowance, 123,000 sq. ft. of rentable area.

Instead of a squat five storey building with 100% coverage and a FAR of 5, but with large 10,000 square feet plazas, the developer could achieve a 25 storey tall building,

with a standard floor size of less than 5,000 square feet. The plaza premium would contribute ten of those floors.

By relinquishing the plaza bonus, large floors could be achieved at the cost of lower total floor areas. Using the arcade premium alone, the total floor area would be 65,000 sq. ft. Using the arcade premium and the setback premium raised the total floor area to 75,000 sq. ft.

The first major American city, however, to enact incentive zoning, was Chicago. The original premium idea seems to have emerged from the 1954 Carson-Pirie Scott competition for replanning the loop district. The award-winning entry of Pace Associates, architects, Realtor Graham Aldis, and Lawyer Robert Cushman proposed bulk bonuses for buildings abutting open spaces and rivers. The idea was then substantially modified and in its final form, in large measure reflected the interests of leaders of the real estate community. It became effective in July of 1957.[13]

Apart from sharing the basic principle, the Chicago law had little resemblance to the Philadelphia proposal. The base level in the Chicago Central Business Districts was over three times as high as that proposed for Philadelphia. Chicago, long a city of high-walled streets, gave proportionately more weight to covered arcades.

Richard A. Miller, in an article appropriately entitled "A Key to Open Cities," attributes the higher arcade award

rates to the widening of Congress Street, "Which gave the city a taste of arcades."[14]

Whereas Philadelphia allowed 50,000 square feet as-of-right on a 10,000 square foot lot, Chicago allows a 16 storey building with 160,000 square feet as-of-right. In addition, two floors could be earned by an arcade, bringing the building upto a height of 19 floors, with standard floors of 10,000 square feet. The overall height could be increased to 24 floors through a 10,400 square foot setback premium. The total floor area, however, would only climb by 10,400 square feet from 180,000 square feet to 190,400 square feet. The setback would squeeze the bulk into a more slender tower shape. A plaza premium of 27,200 square feet could increase the FAR to 21.7. Whereas the 10,000 square foot site in Philadelphia accommodated a 25 storey building, the same sized site in Chicago accommodated a 45 storey building. Whereas rentable floor space attributable to bonuses made up considerably more than the Philadelphia building's total bulk, in the case of the Chicago example, premium space accounted only for somewhat more than a quarter of the building's total area.

The plaza premium, although accounting for only approximately 10% of the Chicago building's total bulk, had a most striking impact on the building's shape.

Without the plaza, but utilizing the arcade and setback premiums, the building could be 21 storeys lower, even though

the total floor area remained as high as 190,400 square feet.

For both cities, the possibility of allowing bonuses to be averaged over large, multi-ownership parcels, was considered in order to encourage more cohesive civic design, but Miller reports that "neither city could see its way through the maze of legal and functional problems that such averaging was likely to involve."

Chicago's zoning bonus program, in conjunction with its high base level, was to endanger key landmark buildings clustered in the downtown area, the Loop, such as the Chicago Old Stock Exchange, a 13 storey structure, which utilized less than one-third of the approximately forty-five storeys attainable, if all bonuses were availed of. "Ironically," Costonis observes, "the Exchange was as much the victim of the city's own zoning regulations as of the speculative motives of the building owners." Moreover, Costonis reports that "by awarding enormous premiums for projects occupying a half block or more, the zoning bonus program has brought development on small lots to a standstill, and hastened the amalgamation of existing smaller buildings into assemblages that can exploit the program to best advantage."[15]

The third major city to introduce incentive zoning was to be New York.

Appendix B

Bulk Controls in the R5, R6, R7, R8 Districts

The number of people who can live in a given area is more directly related to the number of apartments provided, than it is to the amount of floor space. If density controls were expressed solely in terms of apartments, population density could not be effectively controlled because of the great variation in apartment sizes.

Voorhees, Walker, Smith and Smith had tried to avoid this problem by varying the limits on the number of apartments permitted according to the apartment size. Under their proposal, a proportionately greater number of 2 room apartments could be built on a given lot, for example, than 5 room apartments. Although this device provided a precise and impartial control, architects and developers complained to the Commission that it would be difficult to manipulate in designing buildings. To overcome this, the Commission introduced a factor of required lot area per room, which varied according to district and building bulk. By dividing the lot area (e.g. 10,000 sq. ft.) by the factor suited to height of a desired structure (50 sq. ft. in a R8 District) the result (200) is the maximum number of rooms permitted for that building. The room count is based on 2½ rooms for the basic living space in an apartment -- living room, dining area, kitchen, bath, foyer and balcony, with each additional room counting as one.

In its Guide to the Proposed Comprehensive Amendment of the Zoning Resolution, the City Planning Commission noted that if bulk controls were merely expressed in limits on density or floor area, there would be no assurance of adequate open space. Therefore, a device for controlling open space was introduced. It expressed the percentage of total floor area that had to be provided in open space on a lot.

In Districts R5 through R9, every increase in the Open Space Ratio also results in an increase in the number of rooms permitted on the lot. For each one point rise in the Open Space Ratio over an Open Space Ratio base figure, there is a uniform reduction in the required lot area per room, until a minimum requirement is reached.

If the Open Space Ratio is 20, for example, then the amount of open space required on a lot would be 20% of the total floor area of the structure. Where the Open Space Ratio is 20, for example, a building whose floor area is 20,000 square feet calls for open space of 4,000 square feet = 20% of 20,000.

Up to 50% of the open space might be used for off-street parking.

Open space had to be accessible to all residents of a building (except in R8 and R9 Districts, where roof area used as required open space need not be accessible to occupants.) Roof area can be counted as open space if it

is not over building areas devoted to residential use, if certain requirements are met.

In R5 through R9 Districts, the higher the building, the greater the Open Space Ratio required. In each of these Districts, every required increase in the Open Space Ratio allows an increase in Floor Area Ratio -- until, at a certain height, it begins to decline. The FAR at a given Height Factor (floor area divided by lot coverage) and a given Open Space Ratio, is established by the following formula:

$$\frac{1}{FAR} = \frac{OSR}{100} + \frac{1}{\text{Height Factor}}$$

A tall, slimmer building in R5 to R9 Districts is permitted a greater floor area ratio than a high coverage, squat building.

In a R5 District, the maximum floor area ratio -- 1.27 -- could be achieved for buildings with a Height Factor of six floors and a corollary OSR of 62.0. The most advantageous relationship, from the point of view of maximizing achievable densities, between FAR, Height Factor and Open Space Ratio was:

- In R6, FAR 2.43, OSR 33.5, and a Height Factor of 13.
- In R7, FAR 3.44, OSR 22.0, and a Height Factor of 14.
- In R8, FAR 6.02, OSR 10.7, and a Height Factor of 17.

In its Guide, Rezoning New York City, the Commission demonstrated the incentive effect of the interdependencies between FAR, OSR, and Height Factor, by giving two examples

in a R7 District:

- A six-storey building with an Open Space Ratio of 20.0 and a total floor area of 54,500 square feet, had a lot area per room of 79. By dividing the total lot area (20,000 square feet) by 79, a maximum of 253 rooms is arrived at. However, if the same bulk is provided in a nine-storey building, the Open Space Ratio rises to 25.5 and the required Lot Area per Room decreases to 72. Dividing 20,000 by 72 gives a maximum of 278 rooms permitted. Added open space in this case gives a bonus of 10% more rooms.
- A six-storey building on a 20,000 square foot lot at 45% coverage has an Open Space Ratio of 20 and an FAR of 2.72. It provides 11,000 square feet of open space and has a maximum permitted floor area of 54,400 square feet. However, a ten-storey building at the same Open Space Ratio of 20, provides 33% coverage and 13,400 square feet of open space. For this, the builder receives a FAR of 3.33 and a maximum permitted floor area of 66,600 square feet. In this case, providing 2,400 square feet more in open space permits a bonus of 12,200 square feet in floor area (two floors).
- In R5 districts, residential density ranged from FAR 1.00 with an OSR of 50 and 212 rooms per acre to FAR 1.25 with an OSR of 62 and 252 rooms per acre.
- In R6 districts, FARs ranged between 2.00, with a corollary OSR of 29.5 and 411 rooms per acre to FAR 2.40, OSR 33.0

and 454 rooms per acre.

- In R7 districts, between FAR 2.80, OSR 18.0 and 538 rooms per acre to FAR 3.40, OSR 21.0 and 605 rooms per acre.
- In R8, between FAR 4.80, OSR 8.0 and 822 rooms per acre to FAR 6.00, OSR 10.4 and 990 rooms per acre.

The 1960 residential mapping of Manhattan, distinguished between the areas of investment building, such as Yorkville and the East Side, the special character of Greenwich Village, the low-rise interior-block enclaves of Murray Hill, Beekman Place, Turtle Bay and, in the words of Friedman, the "more amorphous and nondescript sections of the borough."

The Lower East Side was mapped R7, except for the previously approved Seward Park Urban Renewal Area, which was made R8. The basic philosophy was that R7 represented the last district, which could provide adequately and economically, residential amenities and facilities of space, scale, light and air to low and middle-income families, particularly those in publicly-aided housing.

Implicit in the philosophy was the idea that where urban renewal write-down was used, subsidy should be provided in such a manner that desirable density levels would be possible:[1]

> Experience has demonstrated that the housing equation, particularly as applied by HRB (The Housing and Redevelopment Board) has sacrificed

> density and other planning considerations, in favor of economics, as the prime determinant. The outmoded concept of the highest and best use, has been applied indiscriminately in many areas and R8 has been forced, in some cases and embraced in others by the Commission as in Seward Park Extension, Brooklyn Bridge Southwest, and Bellevue South. In other cases, HRB proposes to use the subterfuge of C5 and C6 designations to build at R8 or higher densities, where planning considerations and Commission decisions have previously indicated R7 as being desirable.

Ed Friedman, a key Department of City Planning planner at the time of rezoning, related the above. Friedman refers to the various studies done by the Department of City Planning and by Dr. Louis Winnick, former Director of Research and Planning for HRB, that "conclusively demonstrated that changes in density in Mitchell-Lama housing have little or no appreciable effect on rental or carrying charges where low, or even moderately-priced land, is involved."[2] Friedman continues:

> The major impetus for higher density, therefore, comes from the desire of the developer to maximize his profit by having a greater number of units, and from the operating agency to increase the housing stock, regardless of marketability, as well as other considerations less important but more formidable than planning.
>
> ...Political pressure, the intricacies of financing and the web of sponsor HRB interaction, has resulted in a number of Mitchell-Lama projects going to R8.

Appendix C

The Rezoning Rationale in Brooklyn and the Bronx

In Brooklyn, approximately one quarter (26-4%) of the borough had been zoned "unrestricted" or "business," despite the fact that the character of many of the areas was predominantly residential.

Under the 1960 Zoning Proposal, the most widely mapped zone in the borough was to be R6, with a maximum FAR of 2.4. R6 permitted 6 storey development in semi-fireproof construction, as opposed to more costly, fully fireproof construction required above a height of 6 storeys. The area, so mapped, was adequately served by mass transit and was generally near to the Downtown Section of Brooklyn. The area included most of the borough's slums, such as Bedford Stuyvesant and East New York, which were later to become Model City Areas.

In the Park Slope section, manufacturing uses, some as large as one city block, were mapped residentially at R6, even though they antedated the residential development by several decades. The good quality of housing and the proximity to Prospect Park were the determining factors.

While the former areas continued their downward spiral of decline, Park Slope was to become an increasingly popular

place of residence for the city's middle class.

In Brooklyn Heights, mapping followed fairly closely the existing land use. R6 was mapped along the promenade to Hicks Street to preserve the historical buildings and, at the same time, give access to breezes and not block the view of the harbor for taller in-lying buildings.

R7 was chosen to accommodate Cadman Plaza housing, an Urban Renewal area, then in planning, and to give redevelopment incentive to the deteriorating housing to the north, between the housing development and Hicks Street.

In the Bronx, R8 was mapped along the Concourse, as far north as Mosholu Parkway, to recognize existing bulks. R7 was mapped on either side of it, for the same reason, and to take advantage of two subway lines serving the area. R7 was also mapped along the length of Bronx Park, to maximize its recreational advantages.

In the South Bronx, characterized by widespread physical blight, a large proportion of its residential area was mapped at R6, which recognized or went slightly beyond recognizing existing bulks. At the time, it was recognized that this mapping designation would probably discourage private renewal attempts. Substantial R7 was mapped along the route of the East Side IRT subway, near Westchester Avenue.

Appendix D

The Ineffectiveness of the Sliding Scale Bonus Systems

As will be recalled, Voorhees, Walker, Smith and Smith had not initially planned the bonus device to play a significant role in increasing attainable bulks in the highest residential bulk district. Only subsequently, with Felt fighting the staff for increased density, was the bonus used as a device to justify a 20% increase above the initially envisaged maximum base level. R10, without the 20% bonus, permits 1452 rooms per acre.

Although considerable thought had gone into the preparation of the sliding scale bonus provisions, they were to be singularly ineffective. Most private residential construction occurred at R10 densities. Here the bonus had a striking effect.

The sliding scale bonus idea, as initially described in the Town Planning Review of October 1955, had been viewed as a device with which to combat the problem of the "even leveling upwards," of large contiguous areas undergoing redevelopment, in central London. It was meant to encourage developers to pool small sites so that large sites could be developed, realizing the advantages of the open plan with increased open space.

In the New York case, the sliding scale was not a sufficient incentive to stimulate private development activity. For one reason, existing densities were already quite high. Even if the maximum FAR allowed in a specific district was availed of, the potentially achievable intensity-of-use differential was not likely to be attractive to conventional developers. Moreover, the maximum FAR would only have been attainable with a high OSR, which would have necessitated a certain amount of assemblage. On conventionally sized district lot sizes, the achievable FAR would be a lot less. The maximum FAR in a R5 district was only 1.26. This was for buildings six storeys high and a large open space ratio. R5 was mapped mainly to recognize existing bulk. The OSR which called for significantly enhanced open space standards, worked together with a generally non-existent achievable intensity-differential in a counter-productive manner as a deterrent to redevelopment, whether privately or publicly initiated.

To a considerable extent, basically similar building types existed in R5, R6, R7 and R8 districts. Town houses and brownstones were encountered in all these districts. Typical Old and New Law tenements were encountered, not only in R7, R8 and R10 districts, but also in R6 and R5 districts.

As a consequence, potentially achievable density differentials are usually higher in R7 and particularly R8 districts. Nevertheless, even R7 and R8 mapping designations were often applied, in a conscious attempt to thwart redevelopment to higher densities of Manhattan's "embassy rows," and to preserve existing residential character on side streets. This gives some indication of how unlikely it is for redevelopment to occur where R5 or R6 are mapped.

In R7 districts, FARs reached a maximum of 3.44, with a minimum OSR of 22.0, given buildings with a height factor of 14. Assuming existing densities of FAR 2.50, in town houses, there was little incentive to assemble large sites required for 14 storey buildings requiring amalgamation of numerous contiguous town house sites, merely to achieve a density increase of less than one point.

What little chance there would have been for the sliding scale bonus system to have been effective was further undermined when portions of blocks facing avenues were redesignated from R8 to R7 densities as initially proposed by V.W.S. & S. to R10. In this manner, options to assemble in R7 or R8 districts were greatly reduced. In R8 districts, the maximum FAR, 6.02, could have led to buildings ranging in height from 17 to 20 storeys, with an OSR of between 10.7 and 11.6. Such large buildings would have been more appropriate at the end of blocks than in the interior block, because of the advantages of benefiting from light and air above the streets

and the avenue, wrapped around the end of the block.

End block sites were often occupied with high coverage, high density tenements. While these might not permit achievement of particularly impressive density differentials, they could, nevertheless, have resulted in handsome achievable intensity-of-use differentials, by virtue of the fact that a significant enhanced spatial environment became attainable. To a considerable extent, then, the breaking up of uniformly mapped, large, contiguous areas, initially proposed by V.W.S. & S. and particularly the inclusion of R10 districts on the same block as R7 and R8, worked against the sliding scale bonus provisions having their intending effect. In New York, the sliding scale bonus system was, then, by and large, inoperative and thus ineffective.

Nevertheless, the condition that had caused so much concern in post-war London did not occur, namely the "even levelling upwards" of densities.

The problem of light and air that had stimulated the concept's initial formulation, was solved in another way, namely through complete revision of Voorhees, Walker, Smith and Smith's initial mapping proposal, in the

manner described in Chapter 5. The sliding scale bonus system is a valuable concept and its application in a modified form should be actively explored.

Appendix E

Some Effects of Zoning on Urban Renewal

In 1968, for the first time since the early 1940's, low rise public housing began to be built in New York -- not free standing on huge superblocks, but as infill along streets -- in accord with the neighborhood development pattern and with the wishes of the people who lived there.

The vest pocket housing program was the most extensive program of its kind thus far undertaken. It was not a substitute for long range planning, but rather a solution to a typical urban problem: the gradual replacement of worn-out parts. It was, as Robert A. M. Stern eloquently stated:

> ...an affirmation that once again it is possible for architects to contribute to the agglutinative process of urban growth and to relate wholly modern buildings to those of the past.

In a major way, the 1960 zoning was to be a source of difficulties. There was a collision between the off-street on site parking requirements and the useable open space requirements. These were impossible to fulfill on the type of sites that had been selected, without resorting to expensive-to-build covered below-grade parking.

In the case of the public housing components of the program, built by the Housing Authority, the problem was not acute because a text amendment to the Zoning Resolution had

reduced the required parking spaces by 25% on the grounds that poor people allegedly had fewer cars. The Housing Authority had, also, in general, secured the larger sites. In the case of the moderate-income sites to be built under the 221(d)3 program, however, there had been no similar reduction in required parking spaces.

H.D.A. pushed for and got a lowered OSR requirement, though car ownership is, if anything, higher in Model Cities areas than in many areas where high parking requirements still hold. Subsequently, H.D.A. pushed for permission to provide common off-site parking for several vest pocket projects.[1]

In the Fall of 1969, Alex Cooper, an early member of the Urban Design Group, who had been appointed to head the newly created Office of Design, within the Housing and Development Administration, said he thought the practical impact of increasing OSRs with increased building heights, through the sliding scale bonus system, in R5 to R9 districts, "negligible," or at least, negligible when compared with the need for new housing units. Cooper believed that a design analysis of the bulk, height and setback regulations done by Rachel Ramati bore him out.[2]

Consequently, the Housing and Development Administration does prefer, within any given zone, a single, high FAR and room count, rather than a FAR and room count that varies with the height factor as in R5 to R9. In some Urban Renewal Areas, such as the West Side Urban Renewal Area, this has led to

difficulties, because H.D.A. gave higher densities to developers in the first stage, leaving little room for higher densities at later stages, when total permitted bulk in the project area is "averaged out."[3]

Another difficulty resulted from the Zoning Resolution's requirement that the entire site be cleared before new construction can go up that takes advantage of the bulk redistribution permissions in the large scale development sections. In Urban Renewal projects, H.D.A. would prefer to have certain buildings standing temporarily as a relocation resource. Arguments in favor of the Zoning provision include the undesirability of living in "the middle of a construction site and the tendency of temporary measures to be permanent."[4]

H.D.A. will push for greater densities wherever possible. The responsibility for considering the planning implications, H.D.A. believes, rests with the City Planning Commission.

The most notable departure from the basic policies, Edwin Friedman notes, "is, of course, the West Side Urban Renewal Area, where a series of changes over the years, has vitiated much of the original intent (of the Zoning Resolution)."

Sliding scale bonuses did not, however, apply to the highest bulk residential district, which was generally mapped in individual increments, bounded on three sides by street or avenue lot lines, of approx. one acre.

Appendix F

The Trend Away From the Thick Vertical Slab Office Building Prototype

Gordon Bunshaft commented on the "shoe box on end" prototype promulgated by the 1960 code: "I think the zoning laws in this city have done more damage than any goddam architect."[1] Big corporate clients are increasingly willing to absorb additional construction expense if this can give their building a more distinguished look and thus more advertising value. Harry Helmsley, for instance, contends that it pays to add five percent to the budget to make an office building something special. A case in point is the 52 storey office building at 140 Broadway. The distinctive, finely detailed building, surrounded by a travertine plaza with a sculpture by Noguchi, a huge red cube balanced on one corner, rented rapidly at $8 to $9 per square foot, high for 1966.[2]

> "If it had come on the market a year later, I could have got $2 more per square foot."

Currently Bunshaft, the architect of 140 Broadway, is designing office buildings that attempt to get away from the angular style by curving the lower facades of his buildings outward within the setback rules.

Appendix G

The World Trade Center and the Envelope Requirements of the Giant Highrise Office Building

The provisions of the Zoning Resolution militated against the super highrise building. The larger the building, the larger the site area needed for it. Without very large sites, new buildings would not be able to rise above the shoulders of other buildings built on typically dimensioned sites in order, for instance, to secure outlook and achieve prominence.

In order to be able to build the 10,000,000 square feet of the World Trade Center it was necessary to build on the extreme periphery of the financial district to achieve a site of a size that could support the desired floor space program and take advantage of the 40% coverage provision. Although the building was at the extreme periphery of the financial district its density increment was an added burden to the district's various systems. The Port Authority which built and operates the Trade Center, was originally created to plan and develop a coordinated system of transportation for the entire metropolitan area. Its Trade Center is already creating more transportation congestion than any other influence in the downtown area.

The building has also been criticized because it competes unfairly with privately owned buildings in that it can afford to charge lower rents for space due to its special status.[1] Theodore W. Kheel says:

> Let's face it. The P.A. has simply ignored its mandate and moved into the business of providing office space on the theory that its a good way to make money.

Appendix H

The Emergence of the Giant Highrise

Tube-within-Tube and framed tube and bundled tube structural systems have made it possible to package space more economically in one extremely large building than the same amount of space in several large buildings.

A case in point is the 52 storey One Shell Plaza Building in Houston, Texas. The building, at 715 feet, is the world's tallest reinforced concrete building.[1] The tube-in-tube concept made it possible at the unit price of a 35 storey sheer wall structure. Houston does not have zoning and consequently does not impose any density or height limitations. Such a building would be very difficult to build in New York City because of the limitations imposed by zoning. Yet it is an economical prototype. Even larger buildings have been erected in Chicago, e.g. the Sears Tower and the Hancock Building, where density limitations are less restrictive than they are in New York.

Appendix I

Patterns of Influence

On Wednesday, September 27, 1961, Abraham "Bunny" Lindenbaum, a member of the City Planning Commission, invited 43 major representatives of the real estate industry to a luncheon in Sakeles Restaurant at 174 Montague Street in Brooklyn. The guests found blank checks at their tables, and Lindenbaum asked each developer individually how much money he was going to contribute to Mayor Wagner's campaign for re-election.[1] Within 30 minutes, $25,000 was raised.

In an editorial, the Herald Tribune called the luncheon "a shakedown." Within the week, Lindenbaum was forced off the Commission.

In recent years, however, Lindenbaum's influence has grown considerably. He is the lawyer-lobbyist for New York's biggest real estate interests. He is the official counsel to the Real Estate Board, presided over by banker Rexford Tompkins. His clients include developers Harry Helmsley, Lew Rudin, Charles Berenson and Peter Sharp.

He has won more zoning variances from the Board of Standards and Appeals than any 10 other lawyers put together,[2] Jack Newfield reports in the Village Voice.

Whenever developers have an item on the Board of Estimate or Planning Commission calendar, Bunny -- or his son, Sandy -- may be observed quietly lobbying in the corridors.

A case in point was the June 10, 1970 hearing before the City Planning Commission, concerning the remapping of several mid-blocks on the Upper East Side from R10 to R8. R10 mapping permits the construction of high-density apartments at FAR 12 and elsewhere, in Manhattan, is only mapped along avenues. Lindenbaum requested an exception of East 88th Street between Park and Madison, so his client, Peter Jay Sharp, could build a luxury high-rise. In 1969, Sharp had contributed over $50,000 to Lindsay's reelection campaign.[3]

On August 12, 1970, the Planning Commission remapped the midblocks to R8 but, despite intense community opposition, exempted Peter Sharp's property. This decision caused the demolition of three structurally sound buildings and the eviction of 160 tenants.

A little more than a month later, the Board of Estimate adopted amendments allowing for more flexible distribution of bulk on highest density residential sites. In commenting on the changes, Samuel H. Lindenbaum, Jr., Abraham Lindenbaum's son, said that anything increasing the flexibility of zoning "has to be helpful." The changes, however, would not lead to more building, he felt, but they were "a first step in reconsidering the zoning and a sign that people are now thinking

about these problems."

Since the changes were discretionary, a developer would choose to build as he did previously, he felt. Wrapping commercial space into a L shaped building would, in particular, lead to a loss of valuable avenue frontage.

The only real incentive to developers, Lindenbaum maintained, was to increase the floor area, "and the real clue to building in Manhattan is to change the R8's to R10."[4] In that R8s are typically mapped in midblock, he was advocating avenue densities of upto FAR 12 in midblock. In effect, this would amount to large contiguous areas built up homogeneously at FAR 12. R10 permits up to 430 units per acre. At R10, a good-sized neighborhood, with 1,200 families, could be built on a single 200 by 600 foot block.

In July, 1970, Walter Thabit, President of Planners for Equal Opportunity, wrote that the administration was taking great liberty with the city's density standards. The City Planning Commission and the Board of Estimate have approved excessive densities for a number of major developments. He cites Battery Park City, with 14,100 dwelling units. Most planners believe this project will be built to R8 densities, Thabit observes, but when net densities are examined, it shows up at R10 levels.[5]

"Keeping a firm hold on the unearned increment gold mine," Thabit argues, "the administration is using its power to control densities to reward old friends and to make new ones." Builders are encouraged to come down to "City Hall" and see whether a deal can be made:[6]

> Behind a facade of public benefits, such as token public housing, arcades, theaters, aesthetics, development to the "highest and best use" and the like, the administration has been selling high densities to the highest bidder.
>
> ...The amount of money being made from these land manipulations runs into the hundreds of millions of dollars. In Battery Park City, for example, land which is being filled at $40 per square foot, will be valued at $100 per square foot when construction is completed. This increase will be reflected in the value of the buildings and in the rents; land profits alone may reach $120 million.

In the United Nations Center, it has been estimated that the extra building bulk permitted by the zoning variances will net its investors $100 million over a period of 40 years. The friendships cemented in these developments alone could "finance a presidential campaign. A few smaller builders are also getting a share of the gravy." Thabit then cites the Special Third Avenue District as an example.

"Planning is designed to get political support," explained planner Edwin Friedman who left the Department of City Planning to work with the New York State Office of Planning Coordination.[7] "While politicians agree that most zoning changes involve patronage," Martin Tolchin writes, "few divulge the quid pro quo, which is financial as often

as it is political." He cites a planner, who said: "There is no way of knowing what is behind the facade of zoning changes. Payoffs occur two-three years later...sometimes in the form of stock tips. We can't trace any wrongdoing in paying off political debts...there is no tin box anymore."[8]

Tolchin finds:

> What does emerge clearly is a picture of zoning as a big business and zoning as a particularly valuable form of mayoral patronage, the political value of which is only slightly dented when it encounters the tragic and often futile opposition of the community.

Mayor Lindsay's campaign finance committee for his reelection in 1969, included numerous real estate developers. Harold Uris, a leading investment builder and president of the Uris Corporation, acknowledged that he was a member of the finance committee.[9] The Uris Corporation had built one of the first buildings under the Theater District legislation of 1967.

In lower Manhattan, Uris interests benefited from street closings and zoning changes facilitating construction of the world's largest private office building. A special text change was made (CP-20131) to permit elevated, rather than street level plazas, to be counted for an open space bonus. The bonus generated 1.45 million square feet of additional floor area. The amenity provided was an open plaza, three storeys above street level, accessible by escalator.

The Executive Director of the Department of City Planning also held the post of Director of the Lower Manhattan Office. Subsequently he became a Vice-President of the Uris Corporation.[10]

In noting that he shouldn't have been listed among the members of the finance committee, Harry Helmsley said, however, that he did intend "to help the reelection campaign of Mr. Lindsay." Prominent members of the investment building community, such as Lewis Rudin, Robert Tisch, Seymour Durst, Charles Berenson, and Litman and Schwarzman, gave large contributions. Sam Minskoff, the developer of 1 Astor Plaza, at Times Square, also contributed.[11]

Other key members of Lindsay's finance committee included several bankers, whose banks had deposits of city funds and also supplied mortgage funds. They represented the Morgan Guaranty Trust Company, with $2.2 million in city deposits; First National City Bank with $93 million, Chemicals Bank; New York Trust Company, with $2 million, the Bankers Trust Company, with $6 million.[12]

The district-initiating building of the Greenwich Street Special District, backed by the Bankers Trust, also participated.

In 1969, Lindsay's campaign raised more than $2 million. At the end, Lindsay had a $215,000 surplus. Much of that money had come from banking and real estate interests.[13]

Lindsay's opponents, Mario Procaccino and John Marchi, by comparison, had each less than $600,000 at their disposal, most of which was raised in small individual contributions.[14]

Donald H. Elliott denied that a real estate developer's campaign contributions had an effect on whether he obtained a zoning change. "I deal with everything that comes before me on the merits of the case, to the best of my ability."[15]

On another occasion, he had said:[16]

> Every sophisticated person knows that the big money contributors, the builders, the corporations, give money to both sides, in a campaign in a city like this -- not just to the man in office.

And the New York Times, in a lead editorial on the Sunday before the November, 1969, mayoral election, elatedly acclaimed the Lindsay administration's record of accomplishments in the broad and fundamental area of planning and urban design, and commented on the proposal, by one of the Mayor's opponents, that the Mayor's special development offices, the Urban Design Group, and other planning efforts, be abolished to save money:[17]

> Never in the city's history would false economy exact a more formidable price.

The editorial concluded that at stake with the Lindsay administration's urban policies, "is the future of New York in the largest sense."

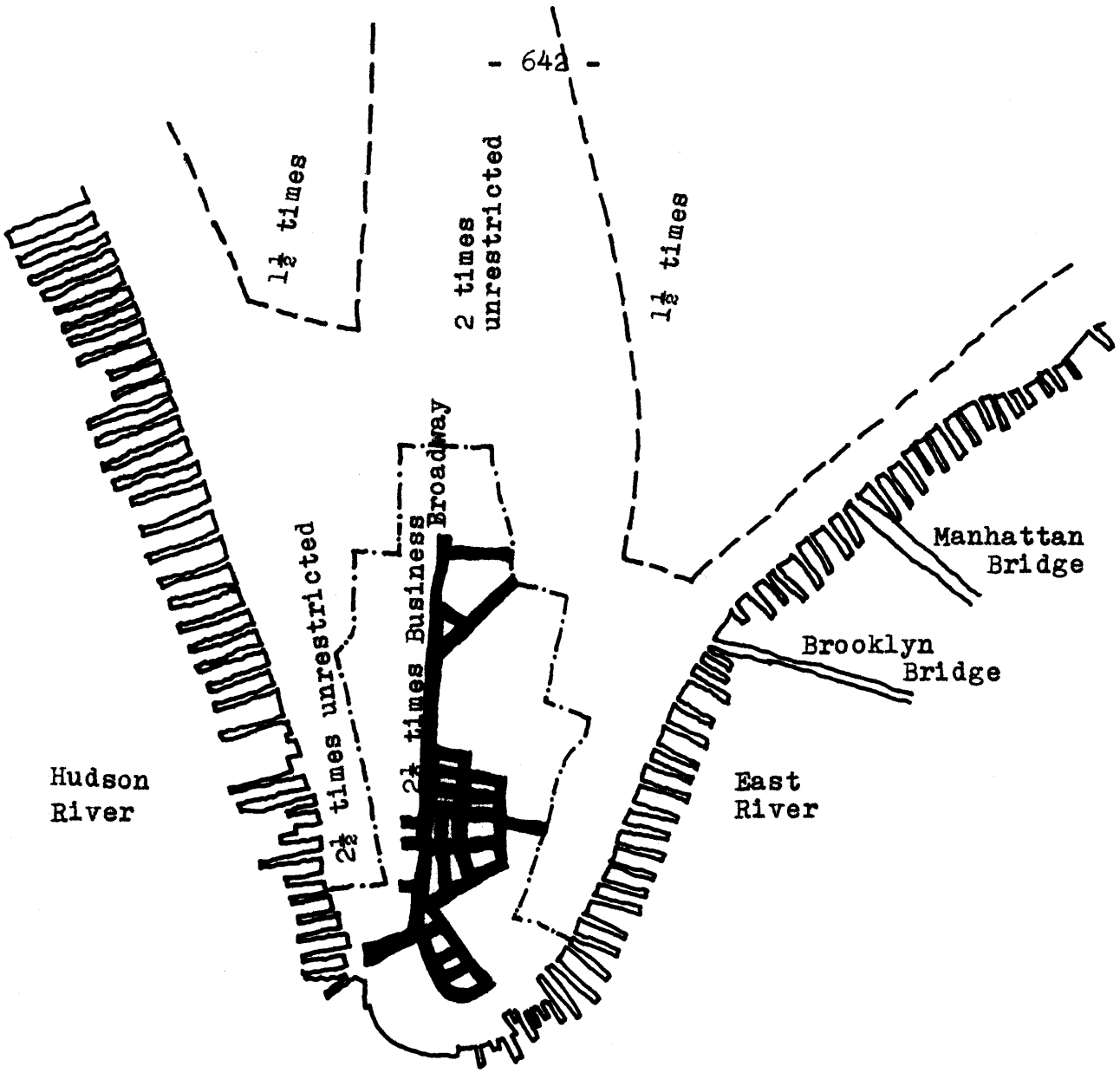


FIG. 1
LOWER MANHATTAN
THE 1916 ZONING RESOLUTION:
LOCATION OF THE TWO AND ONE HALF TIMES
HEIGHT AND BUSINESS DISTRICT

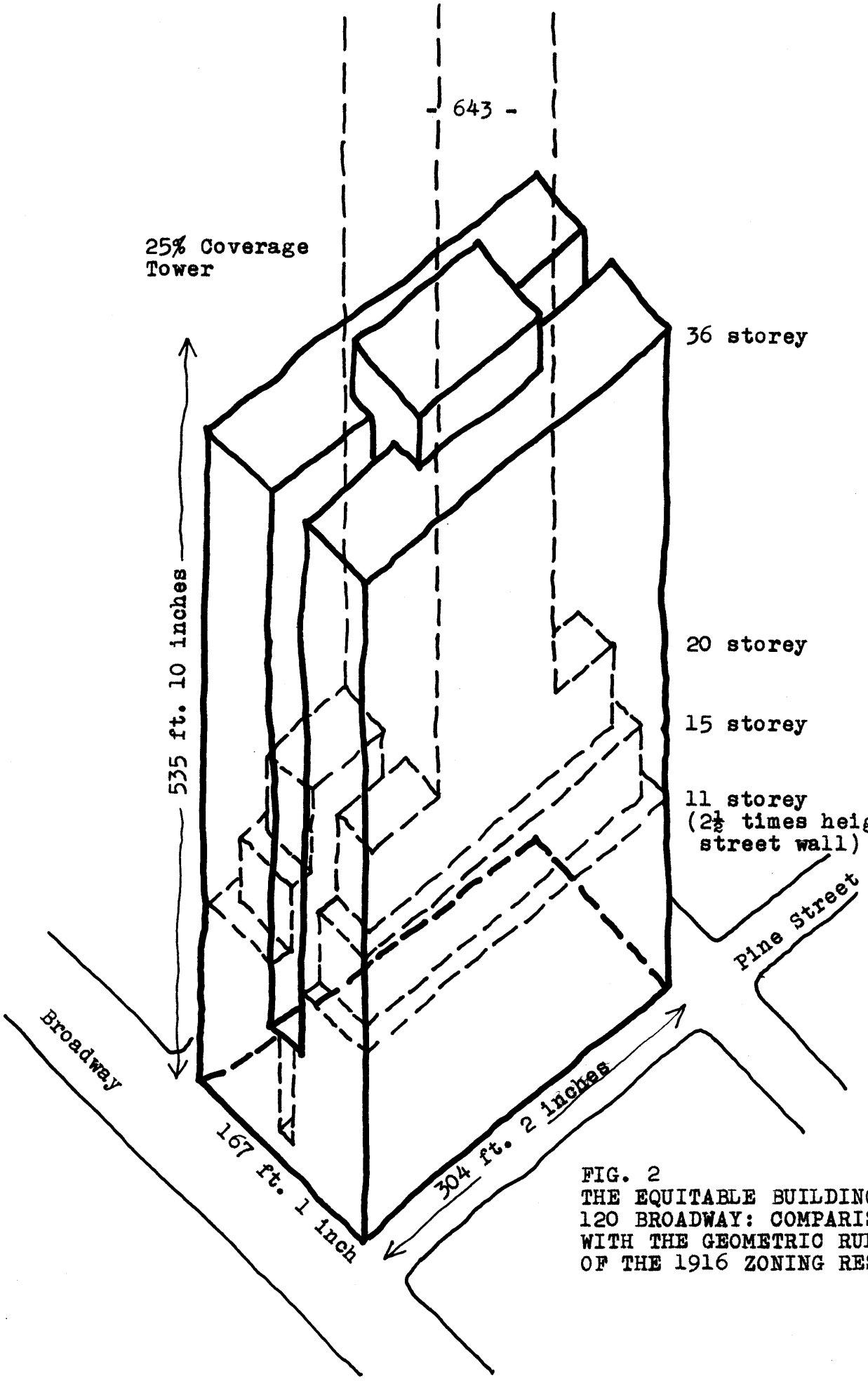


FIG. 2
THE EQUITABLE BUILDING AT 120 BROADWAY: COMPARISON WITH THE GEOMETRIC RULES OF THE 1916 ZONING RESOLUTION

FIG. 3
SETBACK ANGLE

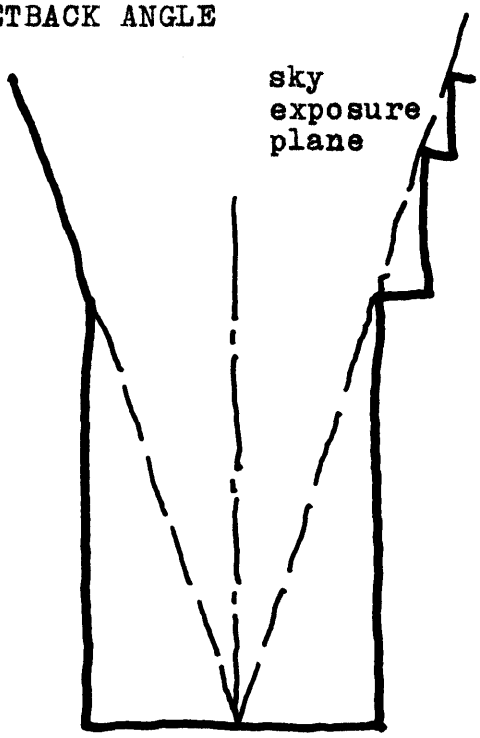


FIG. 4
RELATIONSHIP OF
HEIGHT OF STREET WALL
TO STREET WIDTH

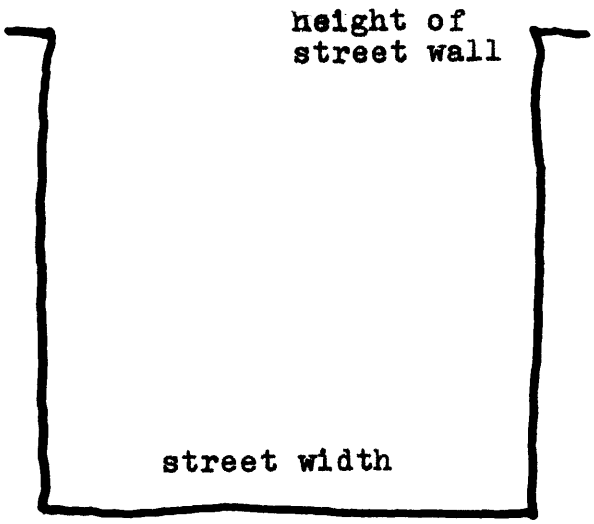
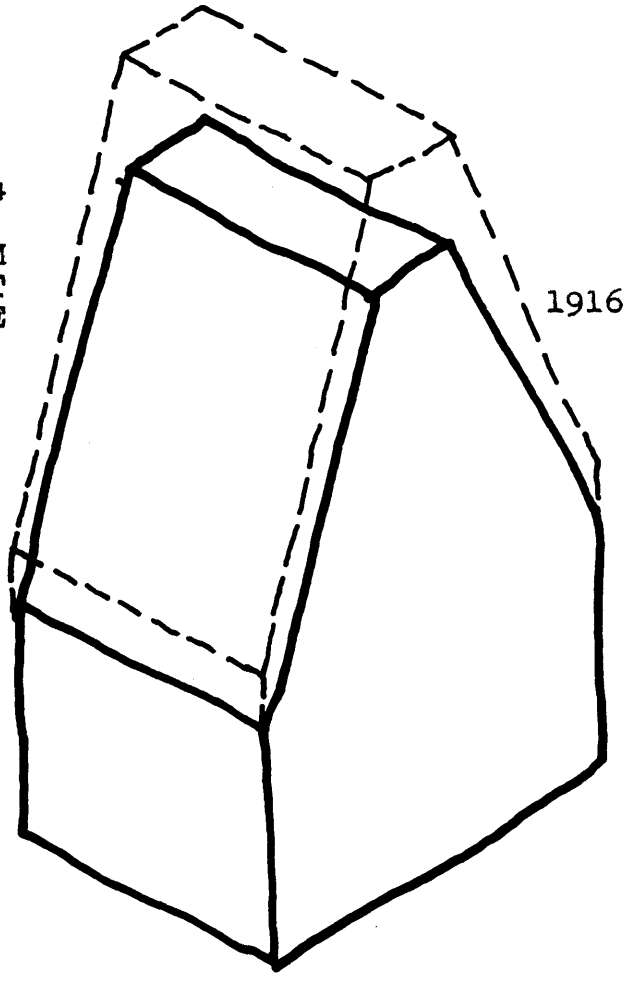


FIG. 5
APPLICATION AND
COMPARISON OF
MODIFICATIONS
PROPOSED IN 1944
TO AN INTERIOR
LOT RUNNING FROM
STREET TO STREET
IN A ONE AND ONE
HALF TIMES
DISTRICT ON A
100 FOOT STREET



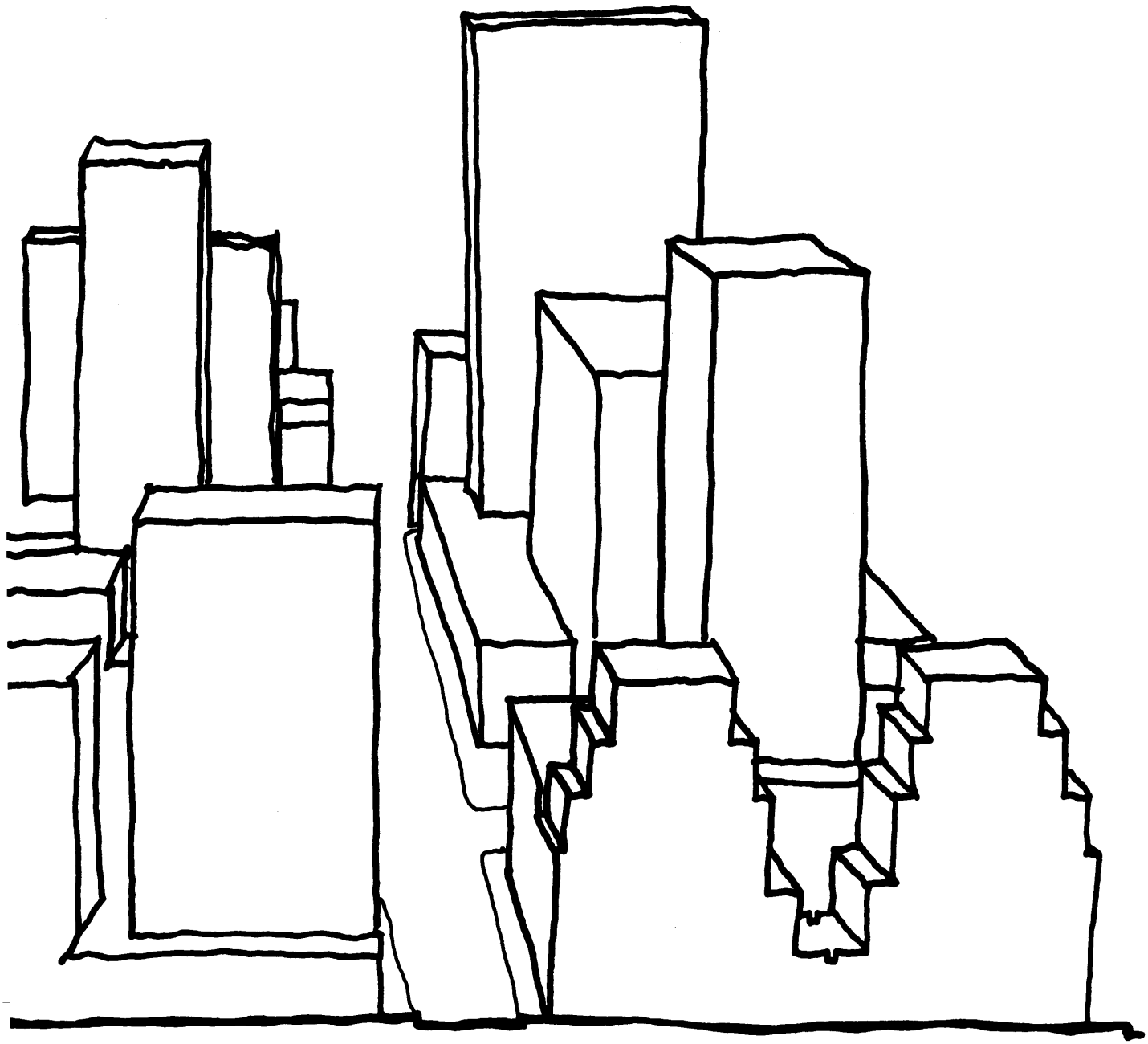


FIG. 6
THE HARRISON, BALLARD AND ALLEN PLAN, 1950:
TYPICAL PROPOSED HIGH BULK COMMERCIAL DEVELOPMENT (FAR 10)

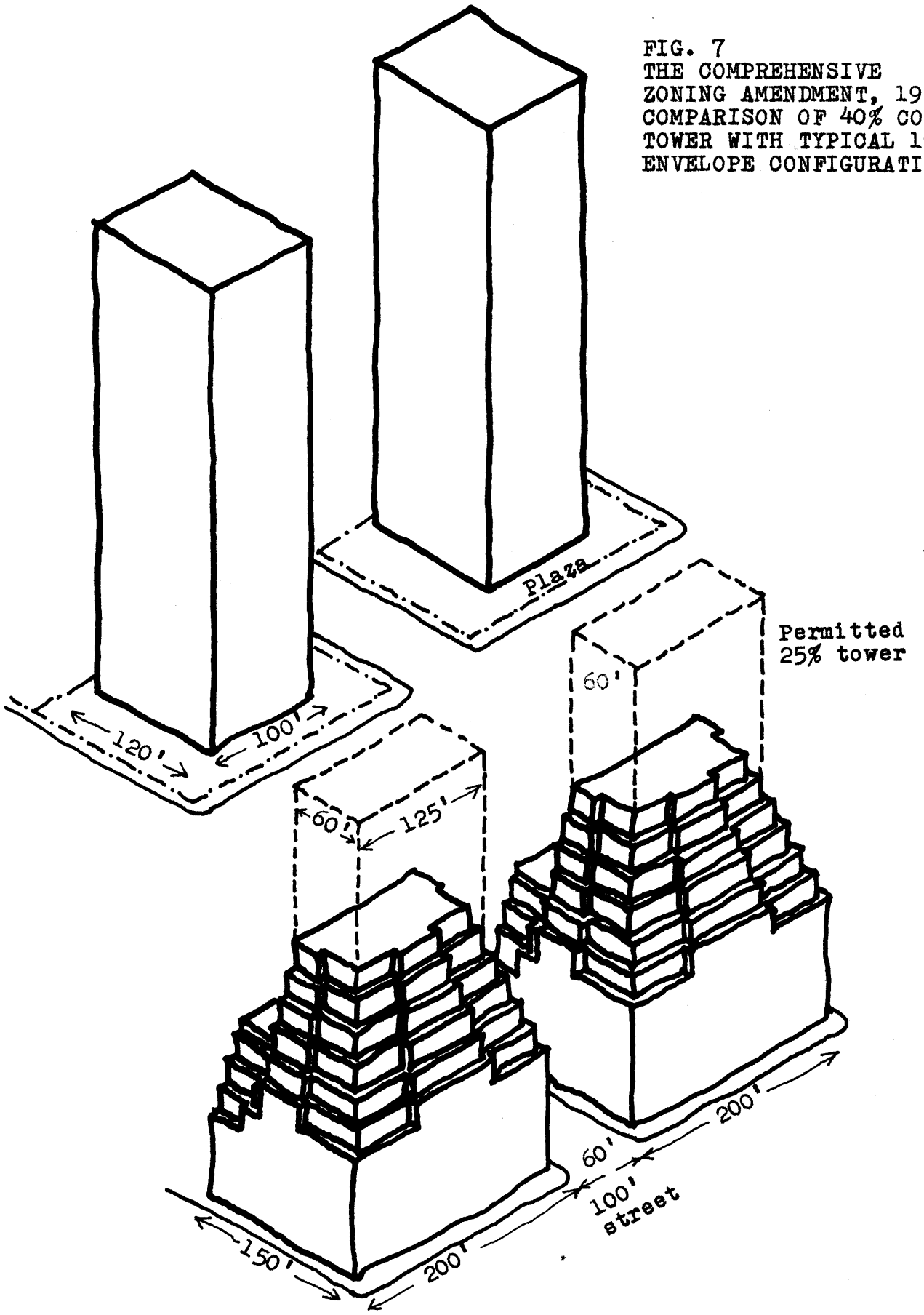


FIG. 7
THE COMPREHENSIVE ZONING AMENDMENT, 1960: COMPARISON OF 40% COVERAGE TOWER WITH TYPICAL 1916 ENVELOPE CONFIGURATION

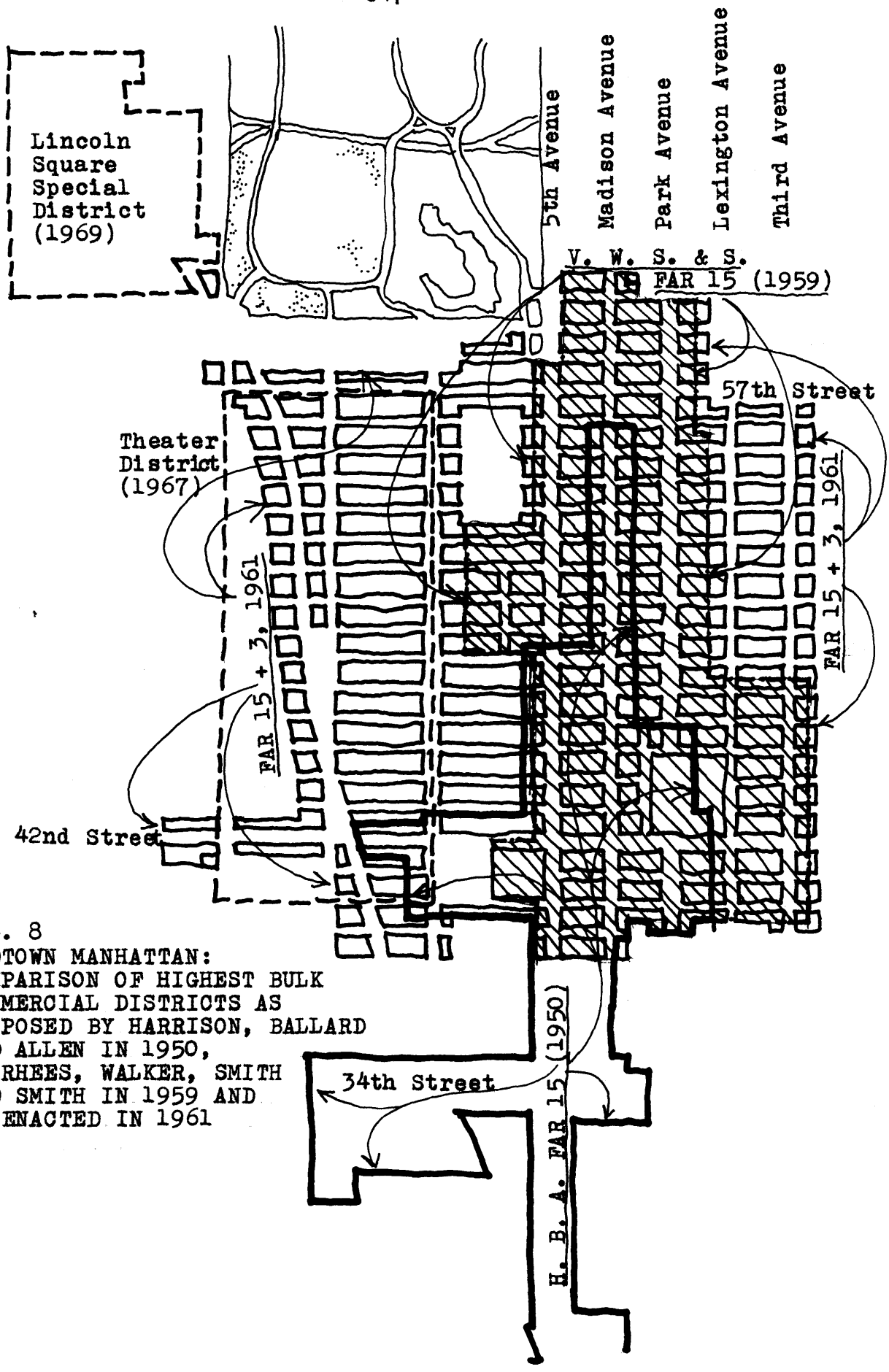


FIG. 8
MIDTOWN MANHATTAN:
COMPARISON OF HIGHEST BULK
COMMERCIAL DISTRICTS AS
PROPOSED BY HARRISON, BALLARD
AND ALLEN IN 1950,
VOORHEES, WALKER, SMITH
AND SMITH IN 1959 AND
AS ENACTED IN 1961

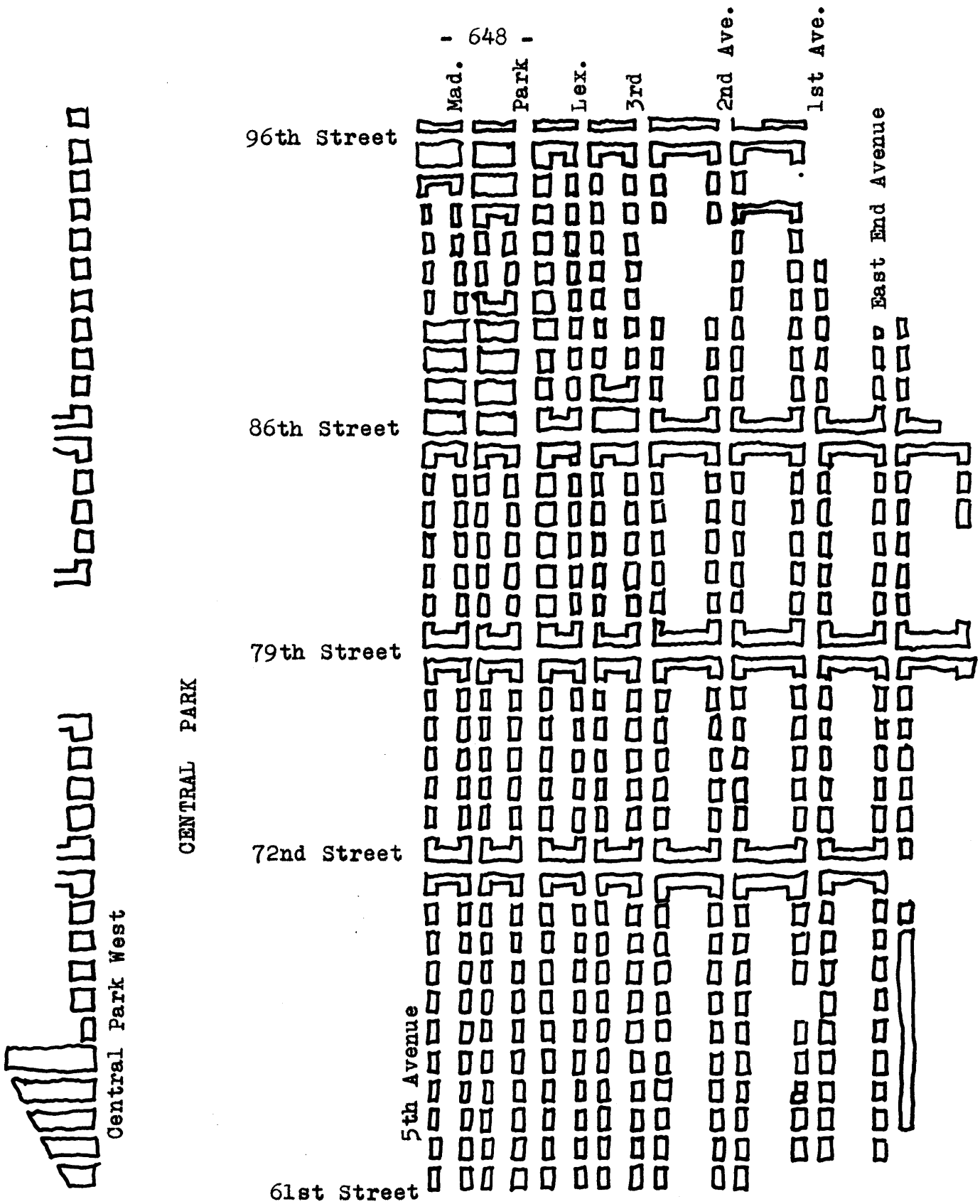


FIG. 9
MANHATTAN'S EASTSIDE:
MAPPING OF HIGHEST DENSITY RESIDENTIAL LAND USE

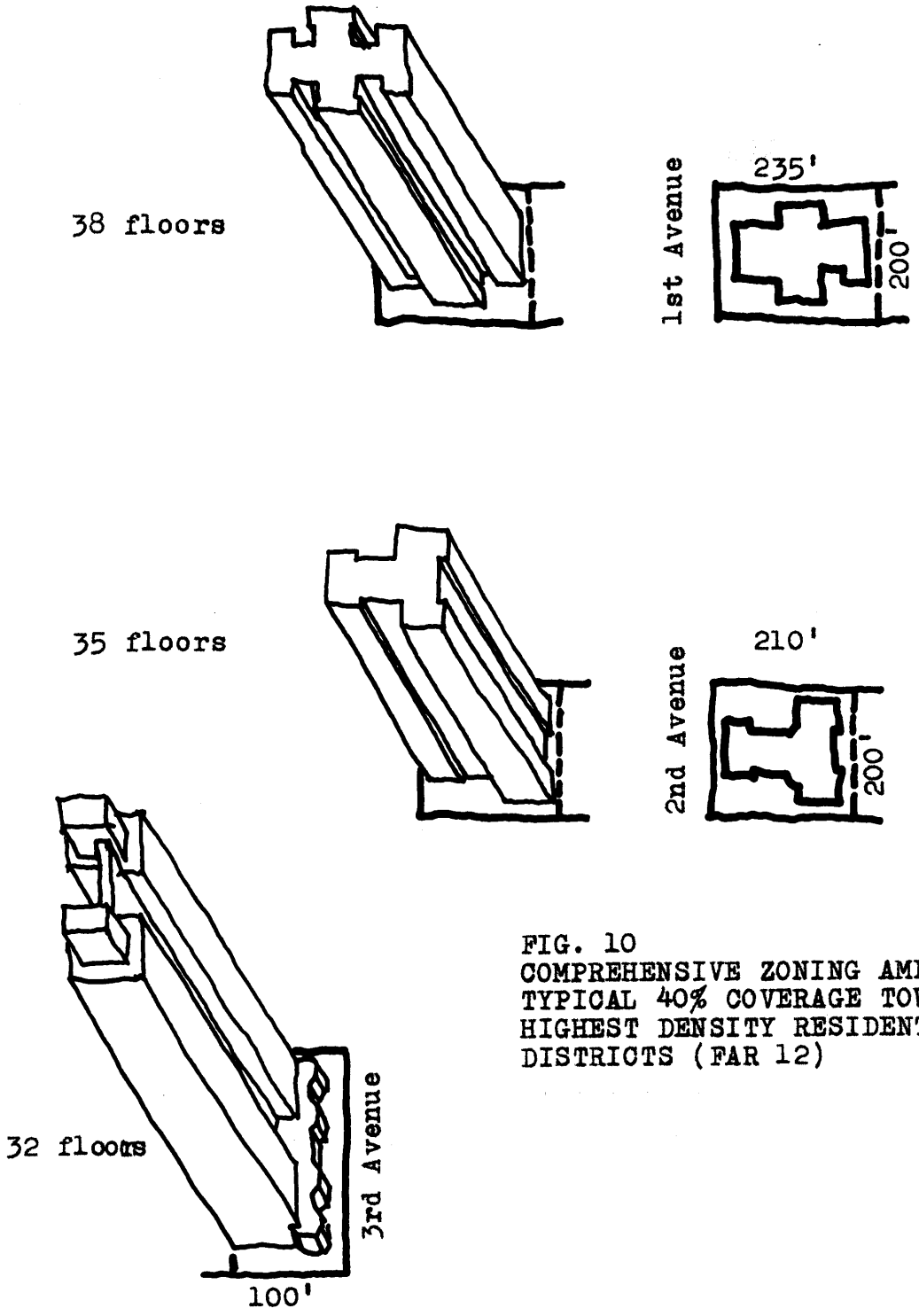
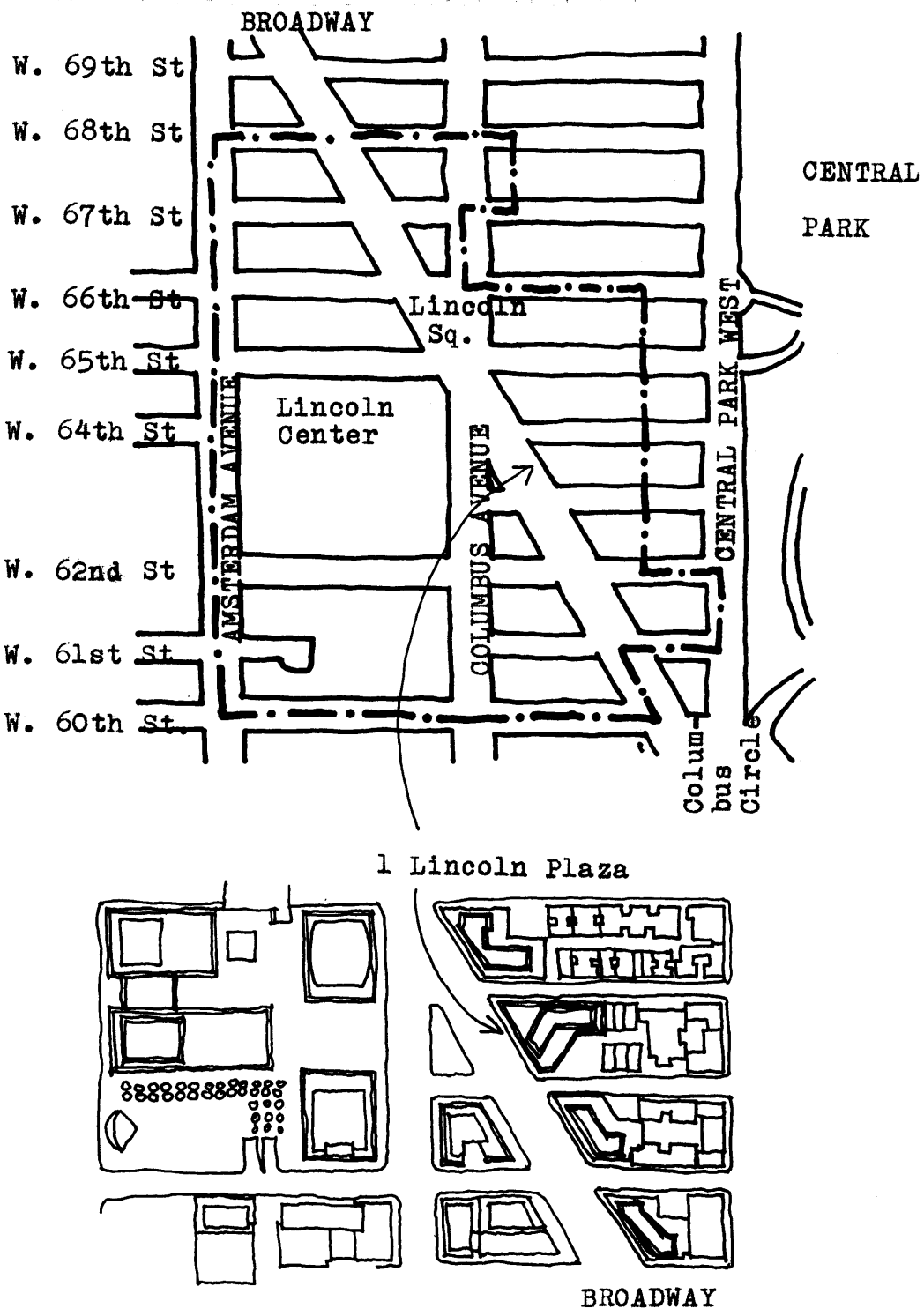


FIG. 10
COMPREHENSIVE ZONING AMENDMENT:
TYPICAL 40% COVERAGE TOWERS IN
HIGHEST DENSITY RESIDENTIAL
DISTRICTS (FAR 12)

FIG. 11
THE LINCOLN SQUARE SPECIAL DISTRICT



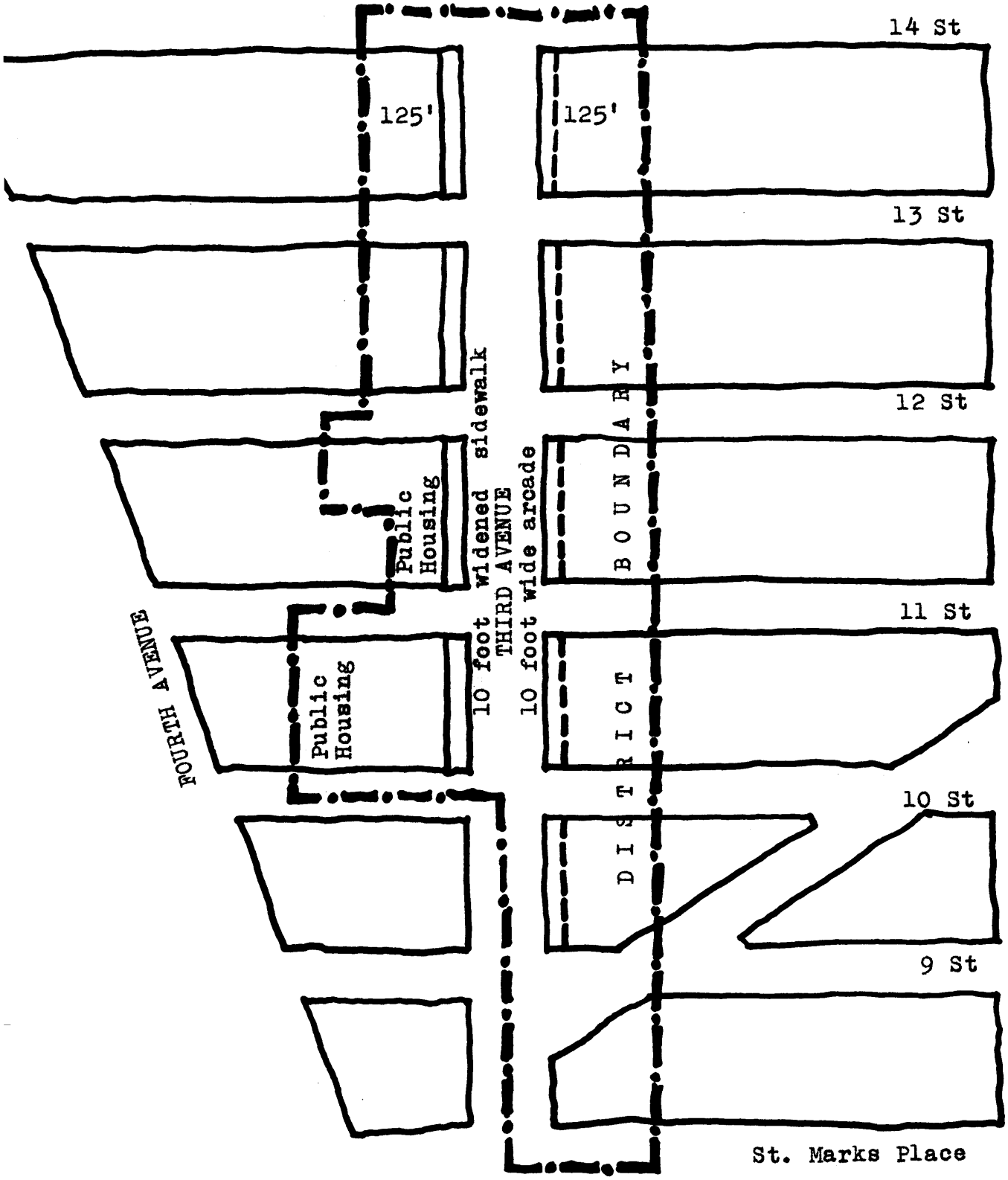


FIG. 12
PROPOSED SPECIAL LOWER THIRD AVENUE DEVELOPMENT DISTRICT

FIG. 13
THE SPECIAL GREENWICH STREET DEVELOPMENT DISTRICT

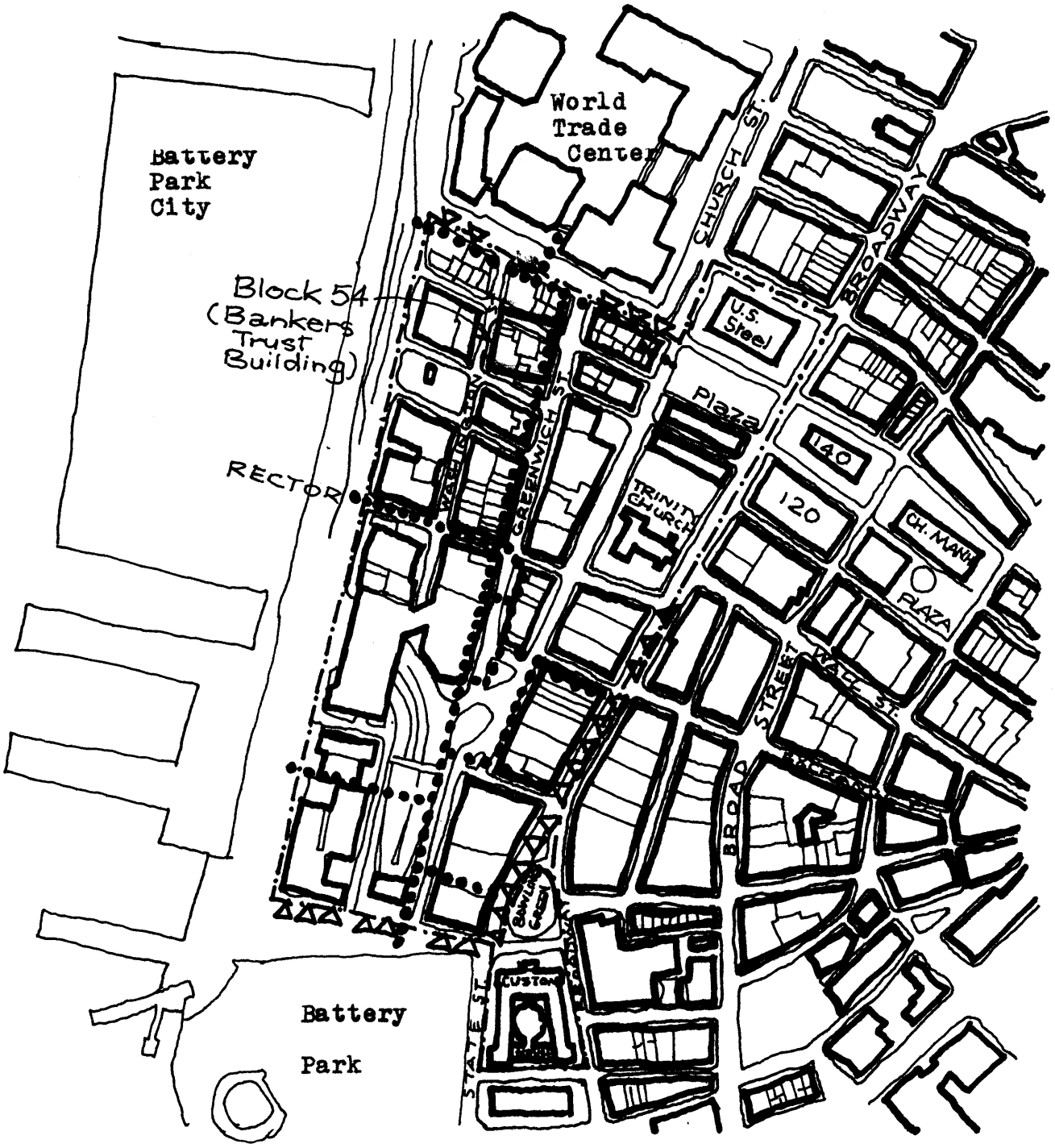
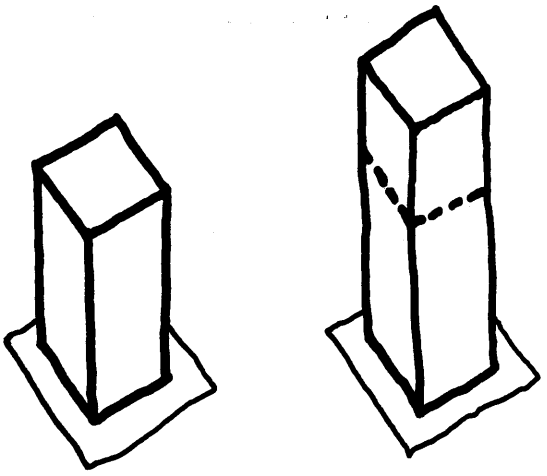
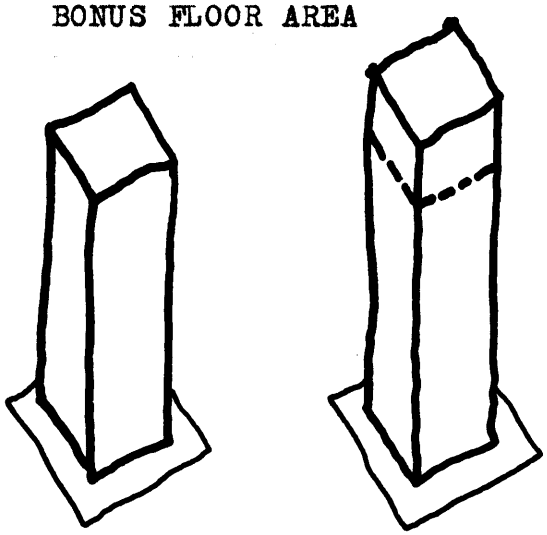


FIG. 14
ADJUSTED BASIC MAXIMUM
FLOOR AREA RATIO



10.0 FAR 15.0

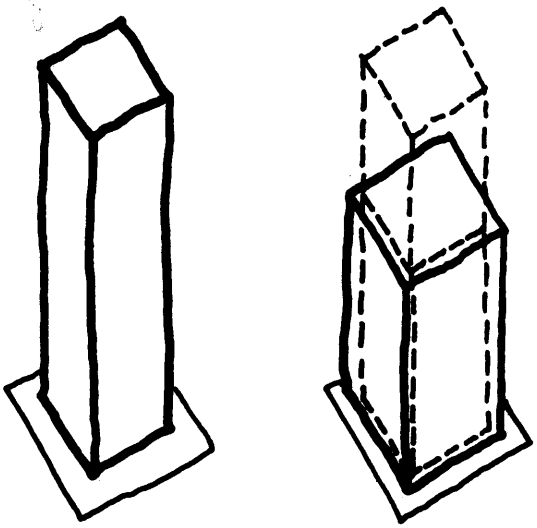
FIG. 15
BONUS FLOOR AREA



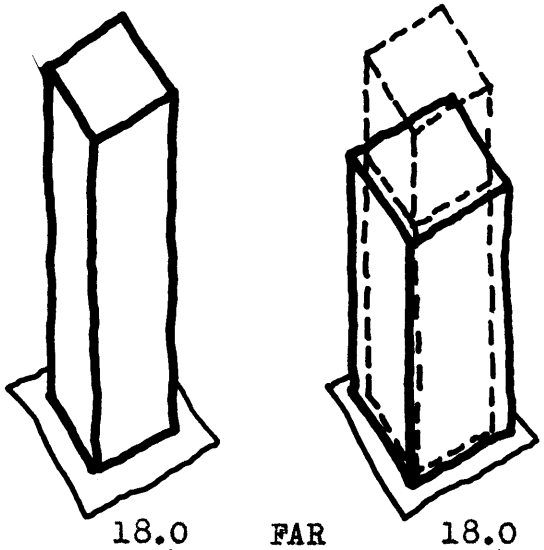
15.0 FAR 18.0

THE SPECIAL GREENWICH STREET DEVELOPMENT DISTRICT

FIG. 16
INCREASED TOWER COVERAGE



18.0 FAR 15.0
40% TOWER 55%



18.0 FAR 18.0
40% TOWER 55%

THE SPECIAL GREENWICH STREET DEVELOPMENT DISTRICT:
BONUSED FEATURES

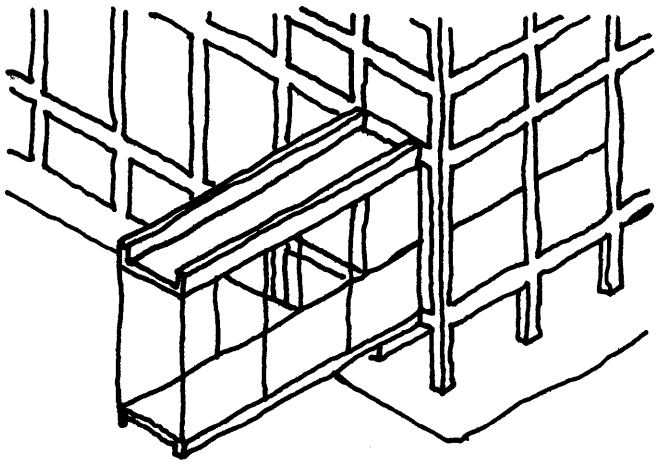


FIG. 17
ENCLOSED
PEDESTRIAN
BRIDGE

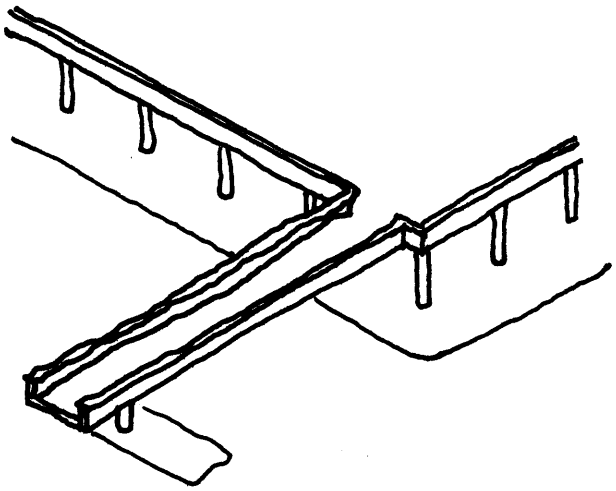


FIG. 18
OPEN
PEDESTRIAN
BRIDGE

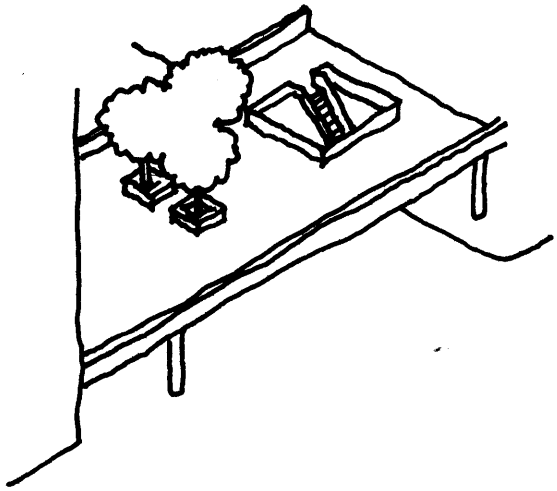


FIG. 19
PEDESTRIAN
DECK

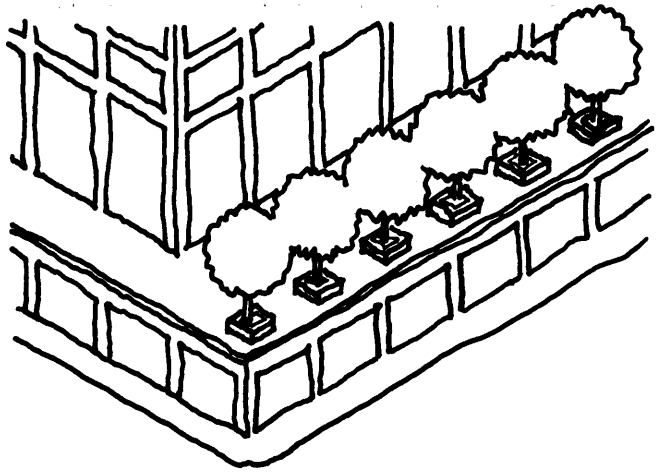


FIG. 20
ELEVATED PLAZA

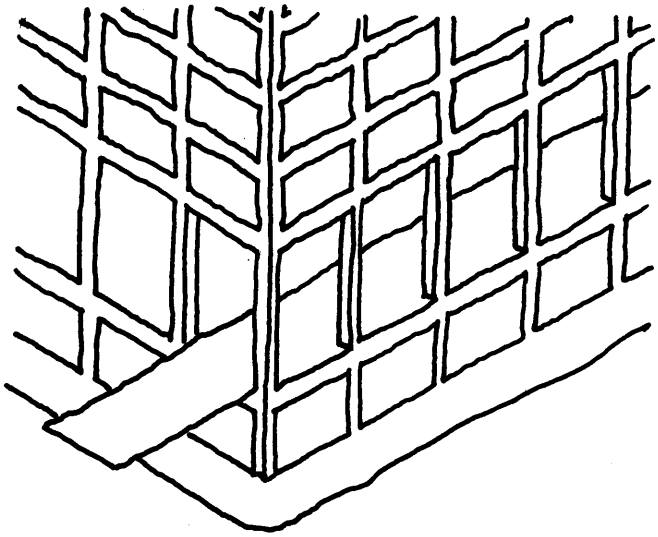


FIG. 21
LOGGIA

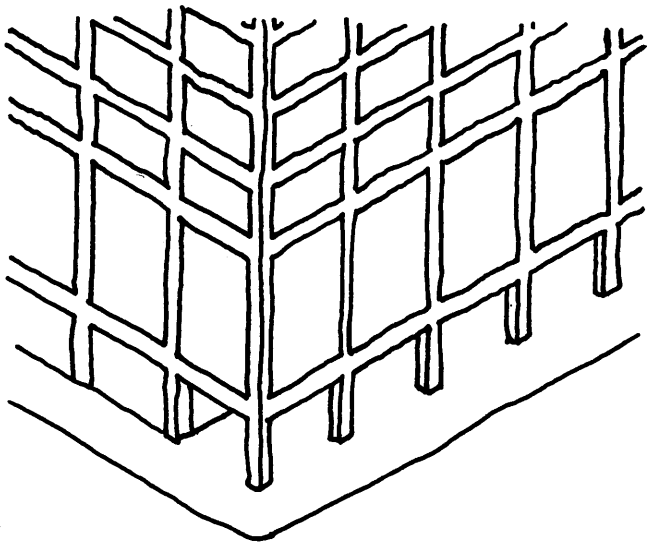


FIG. 22
SHOPPING ARCADE

THE SPECIAL GREENWICH STREET DEVELOPMENT DISTRICT

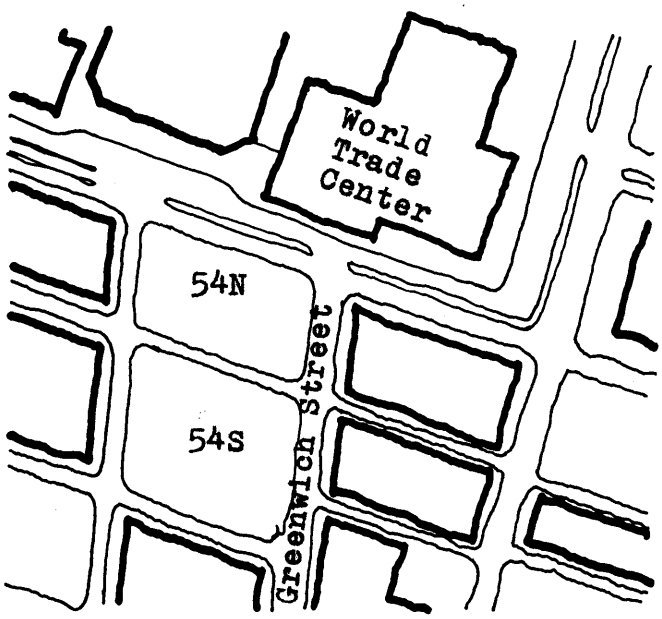


FIG. 23
SITES 54N AND 54S

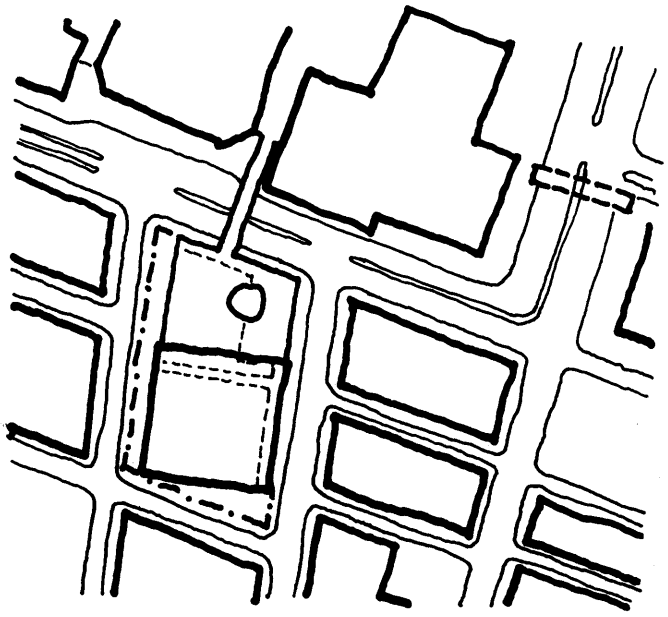


FIG. 24
SITE PLAN OF THE BANKERS TRUST BUILDING

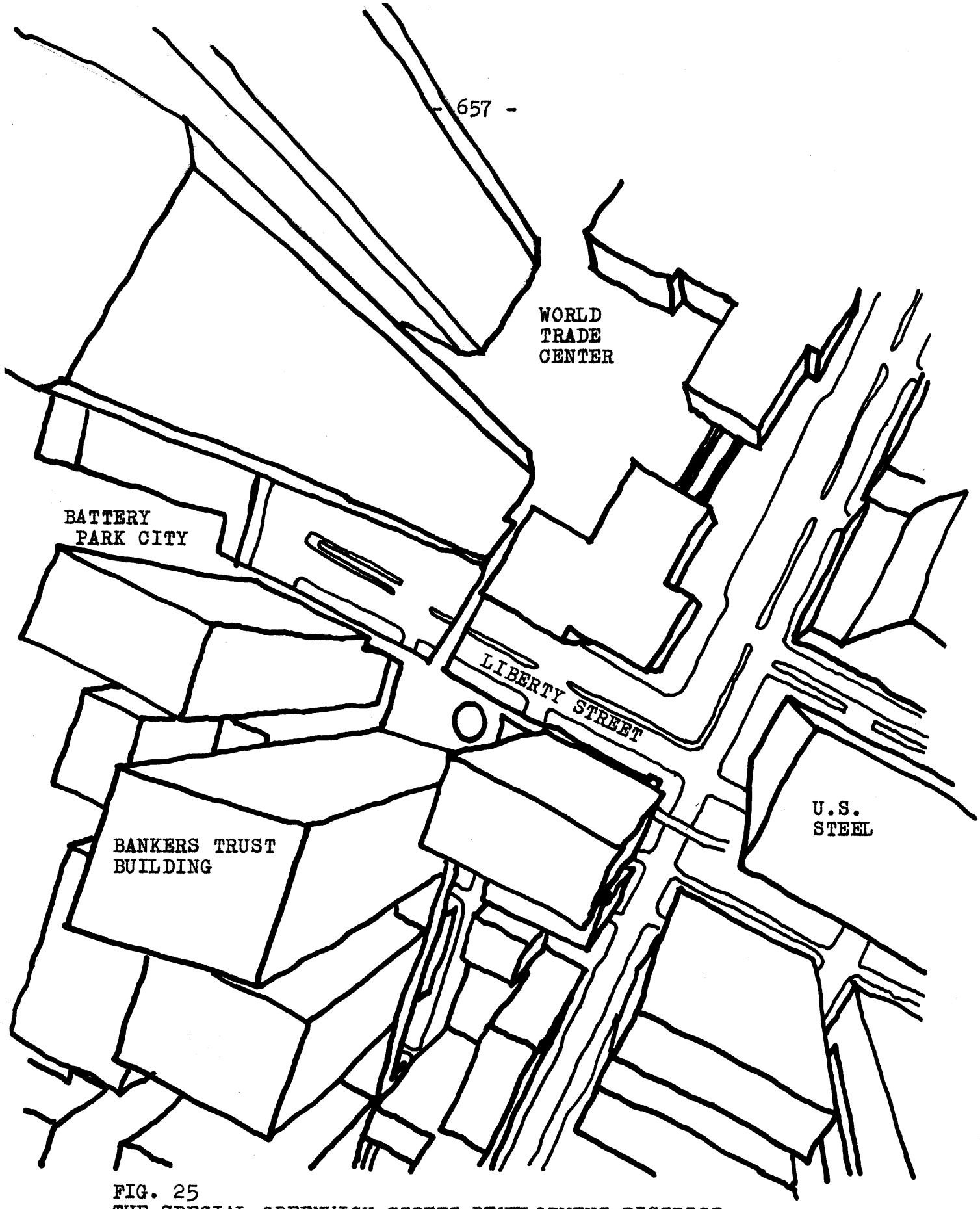


FIG. 25
THE SPECIAL GREENWICH STREET DEVELOPMENT DISTRICT:
THE FIRST INCREMENT

FIG. 26
FIFTH AVENUE SPECIAL DISTRICT:
PROTOTYPICAL MIXED USE
DEVELOPMENT - APARTMENTS,
OFFICES AND SHOPS

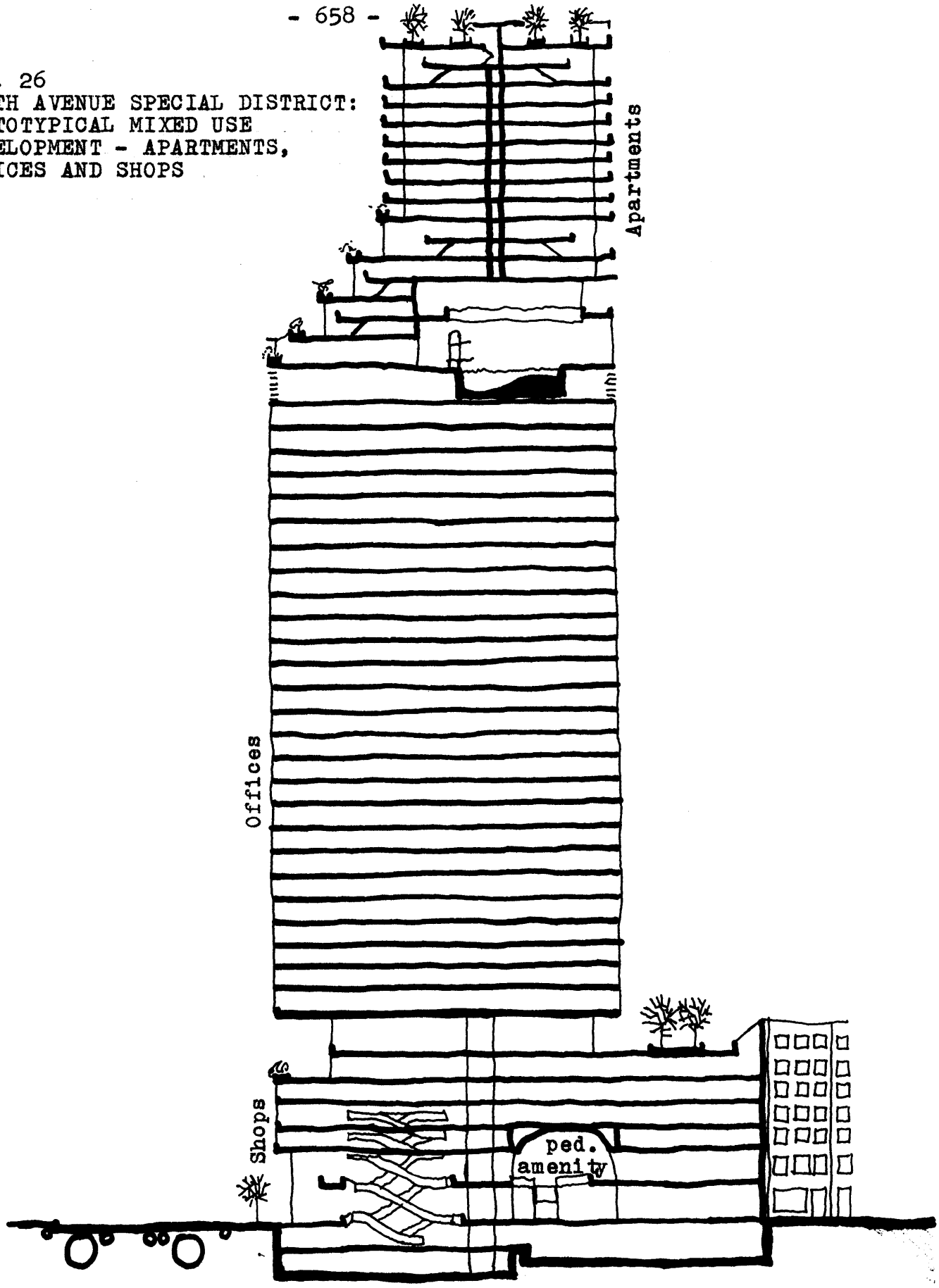


FIG. 27
DEVELOPMENT RIGHTS TRANSFERS:
A PROPOSAL TO TRANSFER DEVELOPMENT RIGHTS FROM ABOVE GRAND CENTRAL STATION TO AN ADJACENT SITE

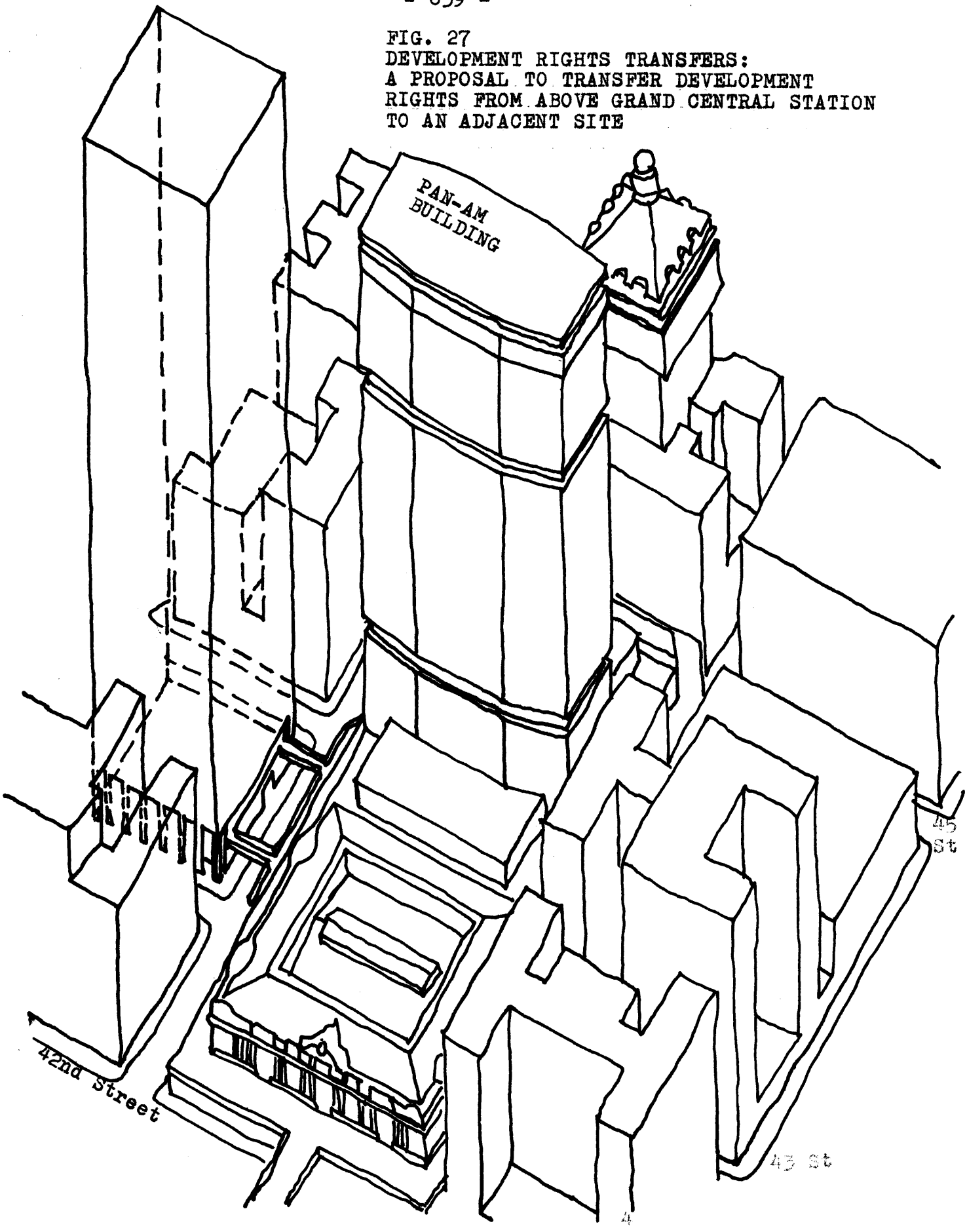
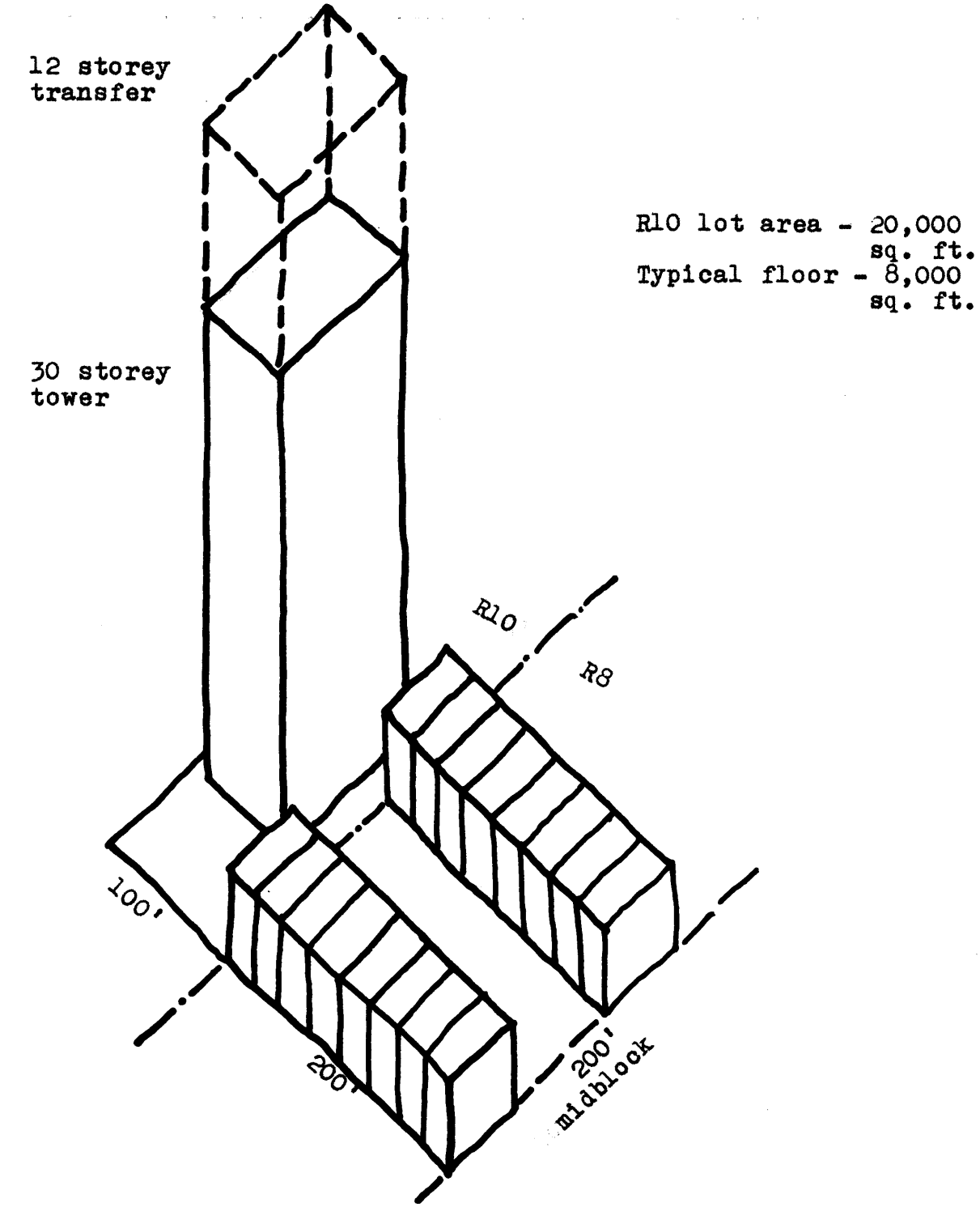


FIG. 28
DEVELOPMENT RIGHTS TRANSFERS:
A PROPOSAL TO INCREASE TOWER HEIGHTS BY TRANSFERRING DEVELOPMENT RIGHTS FROM MIDBLOCK TO AVENUE LOCATIONS



NOTES

Chapter 1 The 1916 Zoning Resolution And the Context Within Which It Was Enacted

1. Earle Shultz and Walter Simmons, Offices in the Sky, (Indianapolis and New York: Bobbs-Merrill, 1959), p. 44-45.

2. Winston Weisman, "New York and the Problem of the First Skyscraper," Journal of the Society of Architectural Historians, XII (March, 1953).

3. Ibid.

4. New York Times, Feb. 9, 1896, p. 15, col. 1; Feb. 16, 1896, p. 14, col. 6.

5. Ibid., Jan. 3, 1896, p. 6, col. 6.

6. Ibid., Jan. 28, 1896, p. 9, col. 2.
The following table shows the limits to height under the bill:

Width of Street	Height of Floor of Top Storey	Probable Total Height
25	75	95
30	85.2	102.2
35	88.7	108.7
40	94.9	114.9
45	100.6	120.6
50	106.0	126.0
55	111.2	131.2
60	116.2	136.2
65	120.9	140.9
70	125.5	145.5
75	129.9	149.9
80	134.2	154.2
85	138.3	158.3
90	142.3	162.3
95	146.2	166.2
100	150.0	170.0

Following are the heights of some of the buildings in Lower Manhattan that had been built by 1896:

Top	of	cornice	of	Equitable Building	110
Top	of	roof	of	Equitable Building	144
"	"	"	"	Cotton Exchange	142
"	"	"	"	Mills Building	140
"	"	"	"	Astor Building	127
"	"	"	"	Delaware, Lackawana and Western Building	155
"	"	"	"	Farmers Loan and Trust Building	160
"	"	"	"	Morris Building	140
"	"	"	"	Courtauld Building	162
"	"	"	"	United States Trust Building	140
"	"	"	"	Aldrich Court Building	138

7. Ibid., Jan. 3, 1896, p. 6, col. 6.

8. On Nov. 22, 1896, two weeks prior to the hearings, the New York Times had published an article on the increasing concentration of tall buildings and businesses near Broadway.

9. New York Times, Dec. 11, 1896, p. 9, col. 6.

10. Ibid., Dec. 18, 1896, p. 9, col. 5.

11. Ibid., Dec. 31, 1896, p. 9, col. 3.

12. Ibid., Dec. 18, 1896, p. 9, col. 5.

13. Ibid., Dec. 11, 1896, p. 9, col. 6.

14. Ibid., Dec. 22, 1896, p. 9, col. 7.

15. Shultz and Simmons, op. cit., p. 63.

16. Ibid., p. 64-65.

17. Ibid., p. 65.

18. Louis J. Horowitz and Boyden Sparkes, The Towers of New York, (New York: Simon and Shuster, 1937), p.2.

19. New York Times, Feb. 16, 1913, Section 8, p. 1, col. 7.

20. Ibid.

21. Horowitz and Sparkes, op. cit., p. 152.

22. Ibid., p. 153-154.

23. New York Times, Feb. 13, 1916, Section 5, p. 18, col. 1.

The article stated that Mortimer:

"As Vice-president of the United States Realty and Improvement Company, which owned and managed the two Trinity Buildings across Broadway...gathered together in a sort of protective league the Hanover Bank, the American Surety, the American Exchange National Bank, the Fourth National Bank, and the National Bank of Commerce to jointly contribute $2,500,000 to protect light, air and view by acquiring an easement above the height of 8 storeys. They wanted to acquire the site for that amount and then erect an 8 storey building on it. But General Du Pont, owner of the block, did not go along with the plan."

"The Equitable block bounded by Broadway, Pine Street, Nassau Street and Cedar Street was in 1916 the most valuable plot of land in the world under single ownership. Land and building together represented an investment of $25,000,000. The property paid in taxes every year to the City of New York $450,000. The rentable floor space amounts to 1,200,000 square feet, twice as much as in any other office building, at that time. It had 12,000 employees."

24. Horowitz and Sparkes, op. cit., p. 159.

25. New York Times, March 1, 1913, p. 9, col. 5; March 11, 1913, p. 8, col. 3.

26. Ibid., March 30, 1913, Section 2, p. 11, col. 1.

27. Ibid.

28. Ibid.

29. Ibid., April 7, 1913, p. 8, col. 7.

30. Ibid., April 10, 1913, p. 10, col. 6.

31. Ibid., April 14, 1913, p. 15, col. 4.

32. Seymour Toll, Zoned America, (New York: Grossman Publishers, 1969), p. 147-148.

33. New York Times, June 29, 1913, Section 3, p. 4, col. 8.

34. Ibid.

35. Ibid., July 20, 1913, Section 2, p. 8, col. 2.

36. Ibid., December 5, 1913, p. 1, col. 8.

37. Ibid., December 4, 1913, p. 8, col. 8; Flagg discusses drafting of a proper building code. December 7, Section 9, p. 1, col. 3; May 20, 1914, p. 12, col. 6.

38. Ibid., May 17, Section 5, p. 11, col. 1; Section 8, p. 2, col. 8.

39. Ibid., May 20, 1914.

40. Ibid.

41. Ibid., May 23, p. 7, col. 1; p. 10, col. 3.

42. Members of the Second Commission, with their principle occupation and borough indicated in parentheses, were: E. M. Bassett (lawyer, Brooklyn, also on First Commission); E. C. Blum (merchant, Brooklyn, also on First Commission); J. E. Clonin (labor leader, Manhattan); O. M. Eidletz (builder, Manhattan, also on First Commission); E. R. Hardy (insurance executive, Manhattan); R. W. Lawrence (manufacturer, Bronx); A. H. Man (lawyer, Queens); A. E. Marling (realtor, Manhattan); G. T. Mortimer (realtor, Brooklyn, also on First Commission); J. F. Smith (retail merchant, Brooklyn); Walter Stabler (finance executive, Manhattan); F. S. Tomlin (labor leader, Brooklyn, also on First Commission); G. C. Whipple (civil engineer, Manhattan); W. C. Wilcox (insurance executive, Staten Island); Lawson Purdy (city government, also on First Commission). Sources: Who's Who in New York, 1914, 1918.

43. New York Times, January 26, 1915, p. 6, col. 2.

44. Ibid., January 29, 1915, p. 11, col. 2.

45. Ibid., February 10, 1915, p. 10, col. 5.

46. Ibid., February 4, 1916, p. 17, col. 2; February 6, 1916, Section 3, p. 4, col. 1.

47. Ibid.

48. Ibid., March 9, 1916.

49. Ibid., March 12, 1916, Section 1, p. 13, col. 1.

50. Ibid., March 28, 1916, p. 22, col. 3.

51. Ibid.

52. Ibid.

53. Ibid., March 31, 1916, p. 20, col. 5.

54. Ibid.

55. Ibid.

56. Ibid., July 9, 1916. Section 1, p. 4, col. 1. Earlier in the year -- see the New York Times of February 13, 1916, Section 5, p. 18, col. 1 -- Mortimer's views were extensively quoted in an article entitled "Chief of Big Skyscrapers Would Curb Heights. President of the Equitable Office Building Corporation Calls Absence of Restrictions Menace,":

"George T. Mortimer, who early 1916 was made President of the Equitable Office Building Corporation and thereby the manager of the biggest building in the world, had tried his best to keep this same building from being put up. Before the new Equitable went up Mr. Mortimer was seeking to block it for his own business reasons. But as a Member of the Heights of Building Commission and subsequently of the Commission on Building Districts and Restrictions, he had urged the regulation of the height of buildings as a benefit to the community. "Some of my friends give me the wink when I advocate such limitation. They smile at me and say: No wonder you don't want to see more buildings go up, now that you're fixed with one yourself! Well, I have to take these friendly gibes as best I can." ...He went on: "There is no doubt that very high buildings have been overdone. Some pay and pay well, but if you could get the income accounts of every building more than 10 storeys high south of Chambers Street you would find the average return upon the investment startlingly low....From the point of view of those who do not own them, the case is just as bad or worse for the high buildings cut off light and air from their neighbors and thereby damage their neighbors property."

"Ten or eleven years ago," said Mr. Mortimer to his interviewer, "my belief could be summed up in the phrase "the sky is the limit." But observation of what unrestricted building means, to land values and to the community as a whole, have compelled me to change my mind."

"For all that one hears about the timidity of capital, a new kind of investment seems to have a strong lure. For, despite the risks, money kept flowing into the construction of skyscrapers and it wasn't long before there was a big over-supply. And that over-supply still exists. Today a considerable proportion of the floor space in downtown office buildings is vacant. This condition has had a lot to do with convincing some people who used to be opposed to regulation that now we should have it..."

"To ask how well an office building pays is something like asking how big is a piece of string. Every one is a case by itself. The new ones, with better elevator service and improvements of all sorts take tenants away from the old ones, and therefore a new building is apt to yield a good return -- always provided that it is well located, well constructed and well managed. But this is sure: An office building that does succeed, succeeds at the expense of the others in the same district. For there are not enough tenants to go around."

57. New York Times, July 17, 1916, p. 7, col. 1.

Chapter 2 The Skyscraper Era - Effects of the Zoning Resolution on the Spatial Environment

1. Cyril R. Knight, "The Effect of Zoning on New York Architecture," Town Planning Review, XI (July 1924), p. 3 - 12.

2. Ibid.

3. Ibid.

4. Ibid.

5. New York Times, November 27, 1926, p. 16, col. 7.

6. Ibid., June 17, 1926, p. 25, col. 7. H. W. Corbett, an influential architect, defended skyscrapers in a debate with H. H. Curran, New York Times, Nov. 19, 1926, p. 27, col. 4.

7. Ibid., June 18, 1926, p. 15, col. 2; July 4, 1926, Section 8, p. 3.

8. Ibid., September 12, 1926, Section 8, p. 2, col. 2. Bassett was an outspoken critic of the Board of Appeals for the granting of unwarranted variances.

In 1927, the Board of Appeals granted permission for the erection of a skyscraper in the financial district 25 storeys high to be located at Broad and Beaver Streets. In this district, under the zoning law, buildings were limited (as to the height of street walls) to 2½ times the width of the street. The variance is for about 5 times, permitting a building to be erected 103 feet higher than that allowed by the zoning laws. The builders argued that in as much as he could erect a pyramid above the allowed height of the street wall with considerable floor space, he might as welll be allowed to omit the pyramid and put nearly as much floor space behind street walls. Bassett pointed out that if this argument were to be followed by a discretionary board, street walls on large plottages might be erected 8 and 10 times the width. "I consider that the variance at Broad and Beaver Street is the greatest abuse of discretion on the part of the Board of Appeals that has occurred this far."

The Citizens Union formally communicated its displeasure to Mayor Walker: "It is high time that Mayor Walker took drastic action concerning the Hylan hangovers who are on the Board of Standards and Appeals... In numerous cases in which there has been absolutely no showing of practical difficulties or unnecessary

hardship, the Board has granted variances from the provisions of the resolutions. Discretion necessarily entrusted has been notoriously abused, often in the interest of real estate speculators who have been well aware of the restrictions governing the property which they have bought or desire to buy, but who nevertheless have succeeded in persuading the Board without proof that they should be granted special privileges."
See "Zoning's Greatest Danger -- Lawless Acts by Boards of Appeals," American City, XXXVII, (August 1927), p. 231, p. 233.

9. New York Times, Nov. 15, 1926, p. 1, col. 4; Nov. 16, p. 1, col. 7; Nov. 17, p. 27, col. 3; Edison also predicted that city dwellers would acquire protective deafness to enable them to endure city noise.

10. Ibid., Nov. 16, 1926, p. 17, col. 4.
Adams thought, for instance, that the proposed Larkin Building -- which was to be the world's tallest -- would be dangerous to the congested theater district and would depreciate values in the neighborhood.
Ibid., December 19, 1969, p. 5, col. 3.

11. Earle Shultz and Walter Simmons, Offices in the Sky, (Indianapolis and New York: Bobbs-Merrill, 1959), p. 131.

12. George B. Ford, Building Height, Bulk and Form -- How Zoning Can be Used as a Protection Against Uneconomic Types of Buildings on High Cost Land, (Cambridge: Harvard University Press, 1931), p. 27, "Waste Bulk at Base of Skyscrapers."

13. Ibid., p. 109.

14. Ibid.

15. Winston Weisman, "Rockefeller Center," Architectural Review, December, 1950.

16. Weisman, op. cit.

17. Margaret Ingels, Willis Haviland Carrier, Father of Air Conditioning, (Garden City: Country Life Press, 1952).

18. Weisman, op. cit.

19. New York Times, March 22, 1936, Section 2, p. 1, col. 6.

Chapter 3 The 1944 Pre-Building Boom Attempt to Upgrade the Quality of the Future Spatial Environment

1. City Planning Commission Calendar, June 14, 1944, "Proposal to Amend Articles III and IV of the Zoning Resolution of the City of New York."
2. New York Times, June 15, 1944, p. 21, col. 5.
3. Ibid., June 18, 1944, Section 8, p. 1, col. 8.
4. Ibid., June 28, 1944, p. 22, col. 3.
5. Ibid., June 29, 1944, p. 25, col. 2.
6. Ibid.
7. Ibid., July 13, p. 14, col. 1.
8. Ibid.
9. Ibid., July 16, 1944, Section 8, p. 1, col. 6.
10. Ibid.
11. Ibid.
12. Ibid.
13. Ibid, July 26, 1944, p. 28, col. 5.
14. Ibid., August 3, 1944, p. 28, col. 2.
15. Ibid., August 8, 1944, p. 26, col. 4.
16. Ibid., August 18, 1944, p. 15, col. 4.
17. Ibid., August 3, 1944, p. 21, col. 4.
18. Ibid., August 6, 1944, Section 8, p. 1, col. 1.
19. Cleveland Rodgers, Robert Moses, Builder for Democracy, (New York: Henry Holt and Co., 1952).
20. City Planning Commission Minutes, September 13, 1944; New York Times, September 14, 1944, p. 23, col. 1.
21. New York Times, September 30, 1944, p. 15, col. 5.

22. Ibid., September 29, 1944, p. 23, col. 8.

23. Ibid.

24. Ibid., October 3, 1944, p. 25, col. 5; October 5, 1944, p. 25, col. 6; October 8, Section 8, p. 1, col. 6; October 15, Section 8, p. 1, col. 3; October 17, p. 33, col. 5.

25. Ibid., November 2, 1944, p. 21, col. 2.

26. V. A. Huie, "Dissenting Report," (New York: City Planning Commission, Nov. 1, 1944); see also New York City Department of Public Works, "Technical Data Prepared in Connection with a Study of the City Planning Commission's Proposal to Amend Articles III and IV of the Zoning Resolution of the City of New York."

27. New York Times, Nov. 15, 1944; November 16, 1944.

28. Ibid., November 12, 1944.

29. Cleveland Rodgers, Robert Moses, op. cit.

30. Ibid.

31. New York Times, November 16, 1944, p. 36, col. 5.

32. Ibid., November 23, 1944, p. 34, col. 1.

33. Ibid., November 25, 1944, p. 9, col. 1.

34. Ibid., December 1, 1944, p. 16, col. 1; Board of Estimate Proceedings, November 30, 1944.

35. New York Times, December 8, 1944, p. 34, col. 5.

36. Ibid., December 30, 1944, p. 21, col. 6. 431 Fifth Avenue Corporation v. City of New York, 270 New York 241 (1945).

37. "Against the rootless; protest against 30 storey apartment building on Washington Square," Architectural Forum, Vol. 82, (April 1945), p. 12.

38. "Postward New York Skyscraper; Office Building for Standard Oil Company of New Jersey," Architectural Forum, Vol. 84 (May 1946), p. 91 - 93.

39. New York Times, July 24, 1946, p. 1, col. 4; editorial, July 25, p. 20, col. 3.

40. Ibid., July 25, p. 23, col. 5.

41. "New York Setback; Moses Zoning Amendment meets final defeat in courts," Architectural Forum, vol. 85, (September 1946), p. 14.

42. Ibid.

43. Ibid.

44. Margaret Ingels, Willis Haviland Carrier, Father of Air Conditioning, (Garden City: Country Life Press, 1952).

45. Reyner Banham, The Architecture of the Well-tempered Environment, (London: The Architectural Press, 1969), p. 220, p. 223.

46. Margaret Ingels, op. cit.

47. "100 Park Avenue, Office Building; Kahn and Jacobs, Architects," Progressive Architecture, Vol. 32, (May 1951), p. 53-66.

48. Richard Roth, "High-rise down to earth; Office Buildings," Progressive Architecture, Vol. 38 (June 1957), p. 196-200.

49. Architectural Forum, vol. 96 (January 1952), p. 121-5.

50. Ibid., vol. 96 (June 1952), p. 101-111; Architectural Record, vol. 111, (June 1952) p. 130-5.

Chapter 4 The Harrison, Ballard and Allen Plan for Rezoning the City of New York and Office Building in the 1950's

1. New York Times, January 14, 1948, p. 1, col. 2; p. 11, col. 4; January 15, p. 22, col. 3; January 20, p. 25, col. 3.
2. Ibid., February 19, 1948, p. 40, col. 5.
3. Ibid., April 9, 1948, p. 39, col. 3.
4. Ibid., p. 20, col. 6.
5. Ibid., May 9, 1950, p. 36, col. 1; p. 28, col. 3.
6. Ibid., June 10, 1950, p. 10, col. 6.
7. Ibid., August 8, 1950, p. 31, col. 5.
8. Ibid., August 12, 1950, p. 12, col. 3.
9. Ibid., September 3, p. 28, col. 7.
10. Ibid., August 24, 1950, p. 29, col. 1; August 25, p. 20, col. 3.
11. Harrison, Ballard and Allen, "Plan for Rezoning New York City: A Report to the New York City Planning Commission," (New York, October 1950), p. 97.
12. Ibid., p. 95, p. 262.
13. Ibid.
14. Ibid., p. 46.
15. Quoted in Cleveland Rodgers, Robert Moses: Builder for Democracy, (New York: Henry Holt and Co., 1952).
16. Harrison, Ballard and Allen, op. cit., p. 88, 260, 262.
17. New York Times, March 24, 1952, p. 25, col. 2.
18. Ibid., March 26, 1952, p. 25, col. 1; for reports on hearings see ibid. April 1, p. 31, col. 1; April 9, p. 33, col. 8; April 23, p. 31, col. 8.

19. Ibid., March 26, 1952, p. 25, col. 1.

20. Ibid., November 8, 1952, p. 25, col. 1.

21. Ibid., December 18, 1952, p. 31, col. 6.

22. Ibid., January 12, 1953, p. 36, col. 8; January 13, 1953, p. 29, col. 6.
For Brooklyn hearings see ibid., March 3, 1953, p. 29, col. 4; for Queens hearings see ibid., April 7, p. 25, col. 1; for Bronx hearings, May 3, p. 84, col. 1; May 5, p. 60, col. 1; for Staten Island, June 16, p. 29, col. 3.

23. "New York's biggest building in 25 years -- Socony-Vacuum," Architectural Forum, vol. 102, (January 1955), p. 86-92.

24. Architectural Forum, vol. 102 (April 1955), p. 9; vol. 106 (February 1957), p. 115; "Seagrams bronze tower," ibid., vol. 109, (July 1958), p. 66-71.

25. Personal communication with Richard Fox, formerly of Emery Roth and Sons, Spring 1973.

26. "A Tall Tower for Time, Inc.," Architectural Forum, vol. 108, (January, 1958), p. 91-9; Architectural Forum, vol. 113, (August 1960), p. 74-81.

27. Architectural Forum, vol. 107 (August 1957), p. 142-5; vol. 113 (November 1960), p. 114-21; Architectural Record, vol. 128 (November 1960), p. 155-62

28. Ibid., vol. 99 (ctober 1953), p. 74.

29. Ibid., vol. 115 (July 1961) p.66-95; Architectural Record, vol. 130, (July 1961), p. 141-50.

30. Harrison, Ballard and Allen, op. cit., p. 97.

Chapter 5 The Enactment of the Comprehensive Zoning Amendment in 1960 and the Emergence of Incentive Zoning

1. S. J. Makielski, The Politics of Zoning, (New York and London: Columbia University Press, 1960), p. 91.

2. New York Times, February 16, 1956, p. 23, col. 2; July 1, 1956, Section 8, p. 1, col. 5.

3. Ibid., February 12, 1956, p. 49, col. 1.
A main obstacle to office development was that since 1916, New York City's zoning law had restricted the tower portion (generally above the 15th floor) of skyscrapers to a floor area not greater than 25% of the base plot on which the building stands. "Height is expensive these days and once you get above 40 stories you have to figure carefully when to cut off," said Norman Tishman, president of Tishman Realty and Construction Co. (see The Wall Street Journal, July 1, 1959). He explained that 666 Fifth Avenue could have gone another 20 stories in the air or further for that matter, but that another "bank" of six elevators would have been needed just to service the extra floors. Such an additional elevator bank plus additional air and utility ducts eating into the floor space of a 25% coverage tower would have made for uneconomically small floor layouts. In the case of 666 Fifth Avenue the elevators alone would have occupied about 900 sq. ft. of space not only on the top 20 floors but on the lower 38 as well. On the lower 38 floors, then, 34,200 sq. ft. of rentable office space would have been lost. Because of the 25% tower coverage provision, builders could not make up for such lost space by making the upper floors as large as the lower ones.

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Appendix C, Elective Pedestrian Circulation Improvements (P.C.I.)

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Description of Improvements by Block
This appendix lists the mandatory pedestrian circulation improvements ("PCI's"), mandatory lot improvements and preferred lot improvements which are designated block improvements on the District Plan (Appendix A) for the Special Greenwich Street Development District. The appendix refers to the text for the requirements and bonus rates for the following improvements:
(a) elevated shopping bridge (Section 86-042)
(b) enclosed pedestrian bridge (Section 86-043)
(c) open pedestrian bridge (Section 86-044)
(d) pedestrian deck (Section 86-045)
(e) shopping arcade (Section 86-052)
(f) elevated shopping way (Section 86-053)
(g) shopping way (Section 86-054)
(h) loggia (Section 86-055)
(i) pedestrian connection (Section 86-056)
(j) covered pedestrian space (Section 86-059(a))

(k) elevated plaza (Section 86-059(b))
(l) elevated block arcade (Section 86-059(c))
(m) requirement to build to street line (Section 86-072)

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BIOGRAPHICAL NOTE

Romin Koebel was born August 10, 1935 in Loughton, Essex, England. His parents were political refugees from Nazi Germany. In 1949, the family moved to Berlin where Romin completed high school. Subsequently he attended the Stuttgart Technische Hochschule from which he received the degree of Diplom-Ingenieur in Architecture in 1964. He then worked as an architect and urban designer, achieving considerable success in the design of city halls, community centers and churches. In 1965 he spent three months touring the United States and in 1966, returned to this country to attend the Urban Design Program at Harvard University's Graduate School of Design, from which he received a Masters of Architecture degree in Urban Design in 1967. He then spent one and a half years working as an Urban Design Consultant in New York City for the New York City Housing and Redevelopment Board and the Housing and Development Administration. In 1968 he returned to Cambridge to enter the doctoral program of M.I.T.'s Department of City and Regional Planning.